HCD-VX3A

SERVICE MANUAL

E Model
Tourist Model

HCD-VX3A is the Amplifier, CD player, Tape Deck and Tuner section in MHC-VX3.

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CD Section	Model Name Using Similar Mechanism	HCD-VX5A/VX5AJ/VX7A
	CD Mechanism Type	CDM38L-5BD34L
	Base Unit Name	BU-5BD34L
	Optical Pick-up Name	KSS-213D/Q-RP
Tape deck Section	Model Name Using Similar Mechanism	HCD-GRX30
	Tape Transport Mechanism Type	TCM-230AWR2/230PWR2

SPECIFICATIONS

Amplifier section

The following measured at AC 110, 220 V 50/60 Hz
DIN power output (rated) 60+60 W
(6 Ω at 1 kHz, DIN)
Continuous RMS power output (reference)
80+80 W
(6 Ω at 1 kHz, 10 % THD)
The following measured at AC 120, 240 V 50/60 Hz
DIN power output (rated) 70 + 70 W
(6 Ω at 1 kHz, DIN)
Continuous RMS power output (reference)
100+100 W
(6 Ω at 1 kHz, 10 % THD)

Inputs
MD/VIDEO (AUDIO) IN: voltage 450 mV/250 mV,
(phono jacks) impedance 47 kΩ
MIX MIC: sensitivity 1 mV,
(phono jack) impedance 10 kΩ
Outputs
MD/VIDEO (AUDIO) OUT:
(phono jacks) voltage 250 mV
impedance 1 kΩ
PHONES: accepts headphones of 8 Ω or more
(stereo mini jack)
SPEAKER: accepts impedance of 6 to 16 Ω
SUPER WOOFER: voltage 1 V, impedance 1 kΩ

VIDEO CD/CD player section

System: Compact disc, digital audio and video system
Laser: Semiconductor laser (λ=780nm)
Emission duration: continuous
Laser output: Max. 44.6 µW*
*This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response: 2 Hz-20 kHz (±0.5 dB)
Wavelength: 780-790 nm
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB
Video color system format: NTSC, PAL
CD OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)
Wavelength: 660 nm
Output Level: -18 dBm

Tape player section

Recording system: 4-track 2-channel stereo
Frequency response (DOLBY NR OFF): 40-13,000 Hz (±3 dB), using Sony TYPE I casette
40-14,000 Hz (±3 dB), using Sony TYPE II casette
Wow and flutter: ±0.15 % W.Peak (IEC)
0.1 % W.RMS (NAB)
±0.2 % W.Peak (DIN)

— Continued on next page —

MICROFILM

MINI Hi-Fi COMPONENT SYSTEM

SONY®

Tuner section
FM stereo, FM/AM superheterodyne tuner

FM tuner section	
Tuning range	87.5-108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 Ω unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
2 Band type:	531-1,602 kHz (with the interval set at 9 kHz) 530-1,710 kHz (with the interval set at 10 kHz)
3 Band type:	
Middle Eastern models:	
MW:	531-1,602 kHz (with the interval set at 9 kHz)
SW:	5.95-17.90 MHz (with the interval set at 5 kHz)
Other models:	
MW:	531-1,602 kHz (with the interval set at 9 kHz) 530-1,710 kHz (with the interval set at 10 kHz)
SW:	5.95-17.90 MHz (with the interval set at 5 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
Thailand models:	220-240 V AC, 50/60 Hz
Other models:	110-120 V or 220-240 V AC, 50/60 Hz
Power consumption	110 W
Dimensions (w/h/d)	Approx. 280 × 340 × 380 mm (11 × 13 3/8 × 15 in.)
Mass:	Approx. 9.5 kg (21 lb.)
Supplied accessories:	AM loop antenna (1) Remote commander (1) Batteries (2) FM lead antenna (1) Front speaker pads (8) Video connecting cable (1)

Design and specifications are subject to change without notice.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on chip component replacement
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

1. SERVICING NOTES ····· 4

2. GENERAL ····· 5

3. DISASSEMBLY
3-1. Case ····· 7
3-2. Front Panel Section ····· 7
3-3. Tape Mechanism Deck Section (TCM-230AWR2/230PWR2) ····· 8
3-4. CD Mechanism Deck section (CDM38L-5BD34L) ····· 8
3-5. Main Board ····· 9

4. TEST MODE ····· 10

5. MECHANICAL ADJUSTMENTS ····· 13

6. ELECTRICAL ADJUSTMENTS ····· 13

7. DIAGRAMS
7-1. Circrit Boards Location ····· 18
7-2. Block Diagrams ····· 19
• CD Section ····· 19
• Video Section ····· 20
• Tape Deck Section ····· 21
• Main Section ····· 22
• Display/Key Con Section ····· 23
7-3. Printed Wiring Board Main Section ····· 25
7-4. Schematic Diagram Main Section (1/4) ····· 26
7-5. Schematic Diagram Main Section (2/4) ····· 27
7-6. Schematic Diagram Main Section (3/4) ····· 28
7-7. Schematic Diagram Main Section (4/4) ····· 29
7-8. Printed Wiring Board CD Section ····· 30
7-9. Schematic Diagram CD Section ····· 31
7-10. Printed Wiring Board CD Motor Section ····· 32
7-11. Schematic Diagram CD Motor Section ····· 33
7-12. Printed Wirint Board Tape Deck Section ····· 34
7-13. Schematic Diagram Tape Deck Section ····· 35
7-14. Printed Wiring Board Panel Section ····· 36
7-15. Schematic Diagram Panel Section ····· 37
7-16. Printed Wiring Board AC Sec Standby Section ····· 38
7-17. Schematic Diagram AC Sec Standby Section ····· 39
7-18. Printed Wiring Board Leaf SW Section ····· 40
7-19. Schematic Diagram Leaf SW Section ····· 40
7-20. Printed Wiring Board CD SW Section ····· 41
7-21. Schematic Diagram CD SW Section ····· 41
7-22. Printed Wiring Board Video Section ····· 42
7-23. Schematic Diagram Video Section (1/3) ····· 43
7-24. Schematic Diagram Video Section (2/3) ····· 44
7-25. Schematic Diagram Video Section (3/3) ····· 45
7-26. IC Block Diagrams ····· 46
7-27. IC PIN Function Description ····· 49

8. EXPLODED VIEWS
8-1. Case Section ····· 58
8-2. Front Panel Section ····· 59
8-3. Chassis Section ····· 60
8-4. CD Mechanism Deck Section-1 (CDM38L-5BD34L) ···· 61
8-5. CD Mechanism Deck Section-2 (CDM38L-5BD34L) ···· 62
8-6. Base Unit Section (BU-5BD32L) ····· 63
8-7. TC Mechanism Section-1(TCM-230AWR2/230PWR2) · 64
8-8. TC Mechanism Section-2(TCM-230AWR2/230PWR2) · 65

9. ELECTRICAL PARTS LIST ····· 66

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

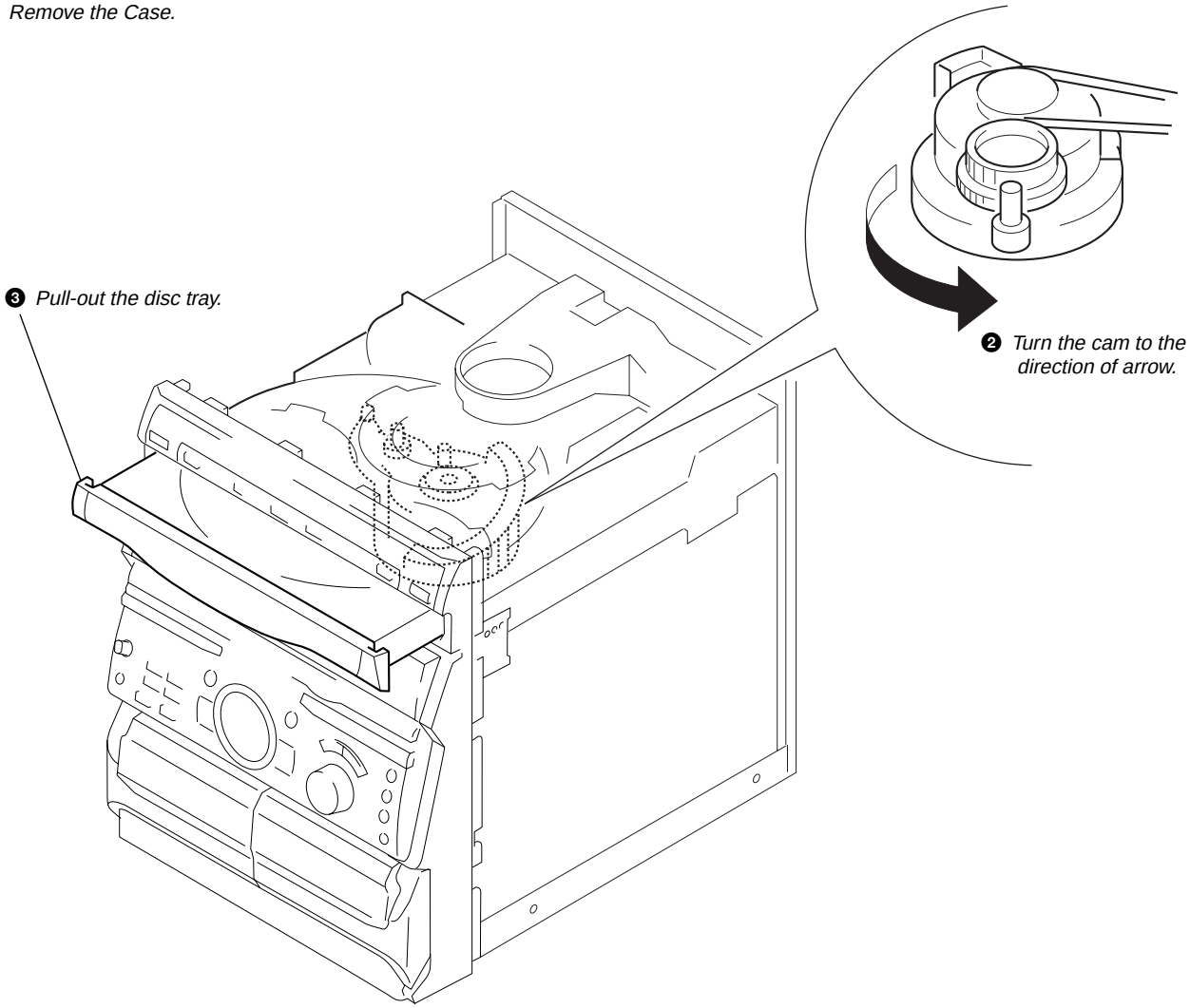
1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing

• Keep the temperature of the soldering iron around 270˚C during repairing.
• Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
• Be careful not to apply force on the conductor when soldering or unsoldering.

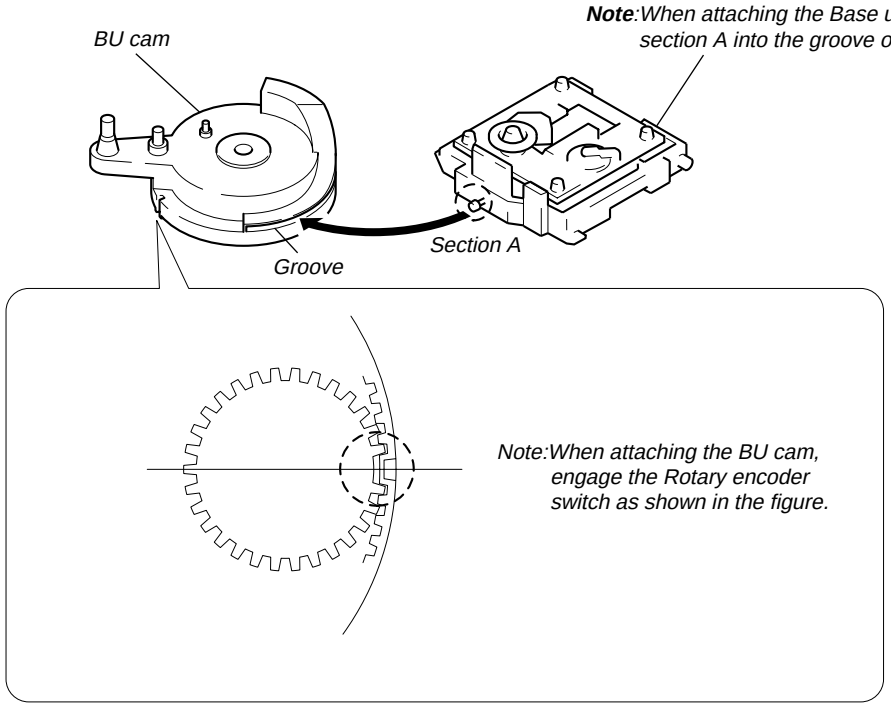
SECTION 1
SERVICING NOTES

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF.

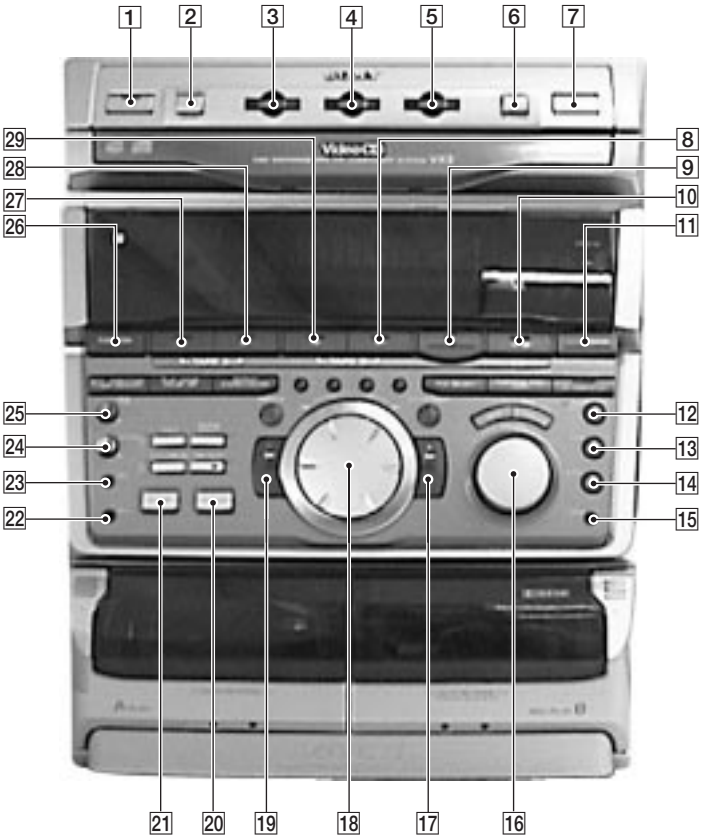
❶ *Remove the Case.*



NOTE FOR INSTALLATION (ROTARY ENCODER)


BU cam
Note:When attaching the Base unit, Insert the section A into the groove of BU cam.
Section A
Groove
Note:When attaching the BU cam, engage the Rotary encoder switch as shown in the figure.

SECTION 2
GENERAL



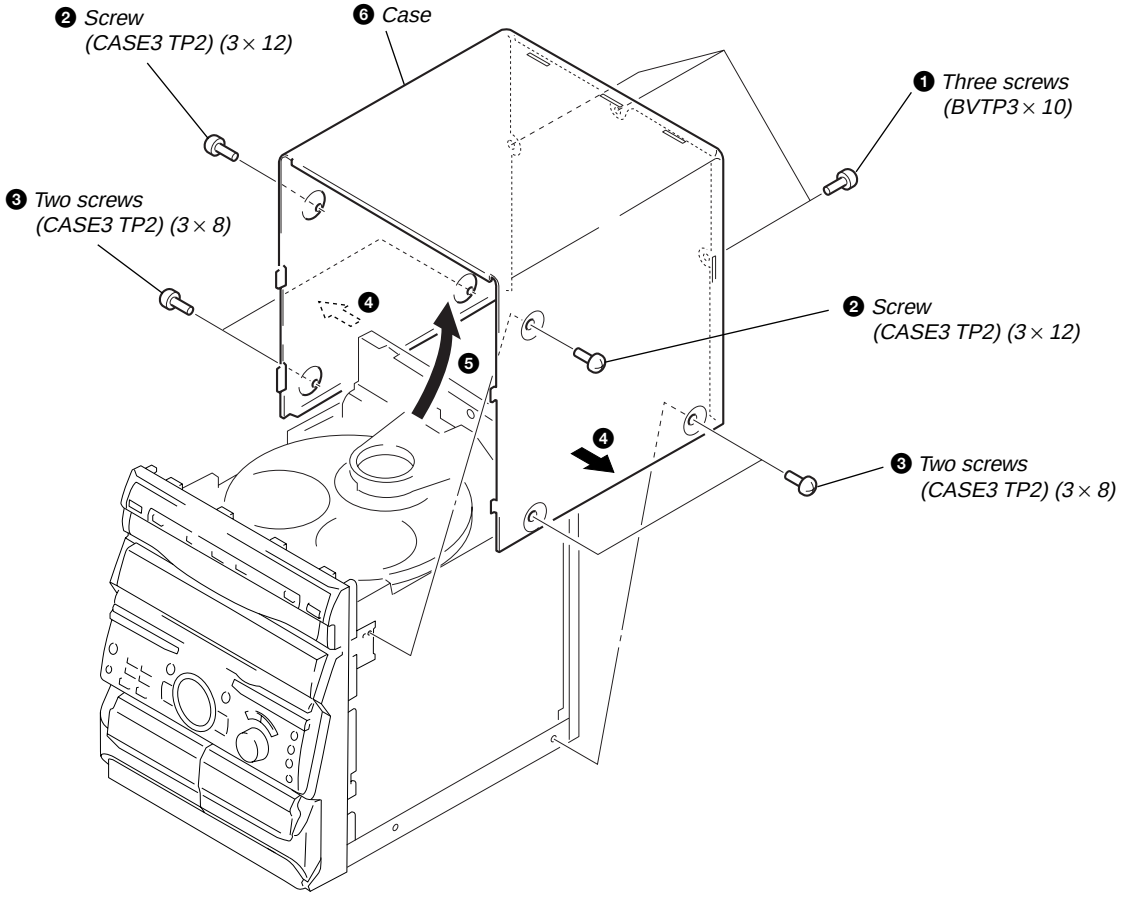
1 I/⏻ button
2 (STANDBY)/DEMO button
3 DISC 1 button
4 DISC 2 button
5 DISC 3 button
6 DISC SKIP/EX-CHANGE button
7 ⏏ button
8 ► (TAPE B) button
9 ■ button
10 ►II (CD) button
11 TUNER/BAND button
12 REC PAUSE/START button
13 HI-DUB button
14 CD SYNC button
15 Phones jack
16 VOLUME nob
17 ►►+ button
18 I◄◄ ►►I dial
19 ◄◄– button
20 CD FLASH button
21 CD LOOP button
22 MIC 2 jack
23 MIC 1 jack
24 MIC LEVEL nob
25 ECHO LEVEL nob
26 FUNCTION button
27 ◄ (TAPE A) button
28 ► (TAPE A) button
29 ◄ (TAPE B) button

30 SELECT button
31 RETURN button
32 PREV button
33 NEXT button
34 FILE SELECT button
35 KARAOKE PON/MPX buitton
36 CD NON-STOP button
37 SURROUND/CINEMA SPACE button
38 DBFB button
39 ENTER/NEXT button
40 GROOVE button
41 TIMER SELECT button
42 CLOCK/TIMER SET button
43 DISPLAY button
44 SPECTRUM ANALYZER button
45 EDIT DIRECTION/TUNER MEMORY button
46 PLAY MODE/DOLBY NR button
47 REPEAT/STEREO MONO button

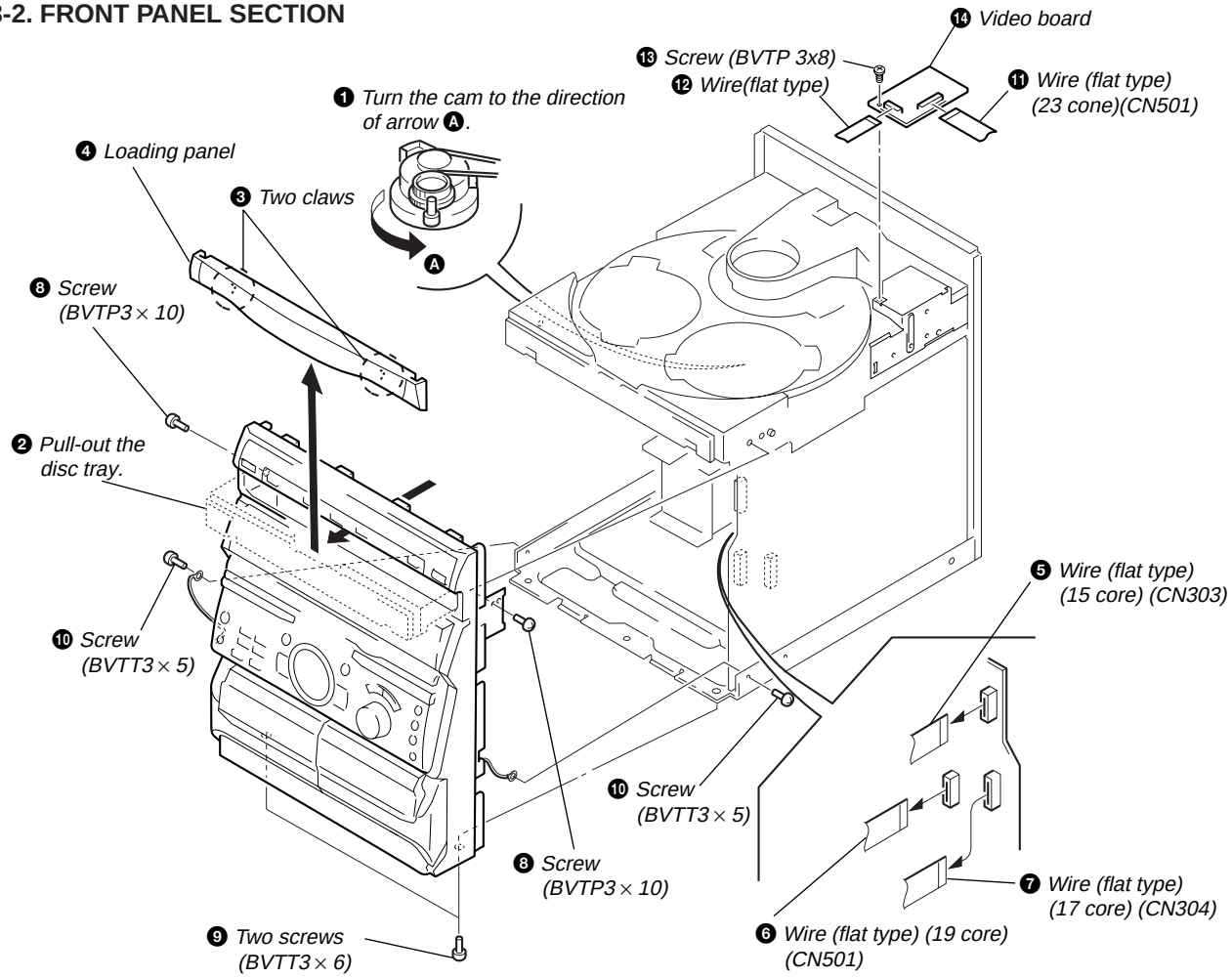
SECTION 3
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

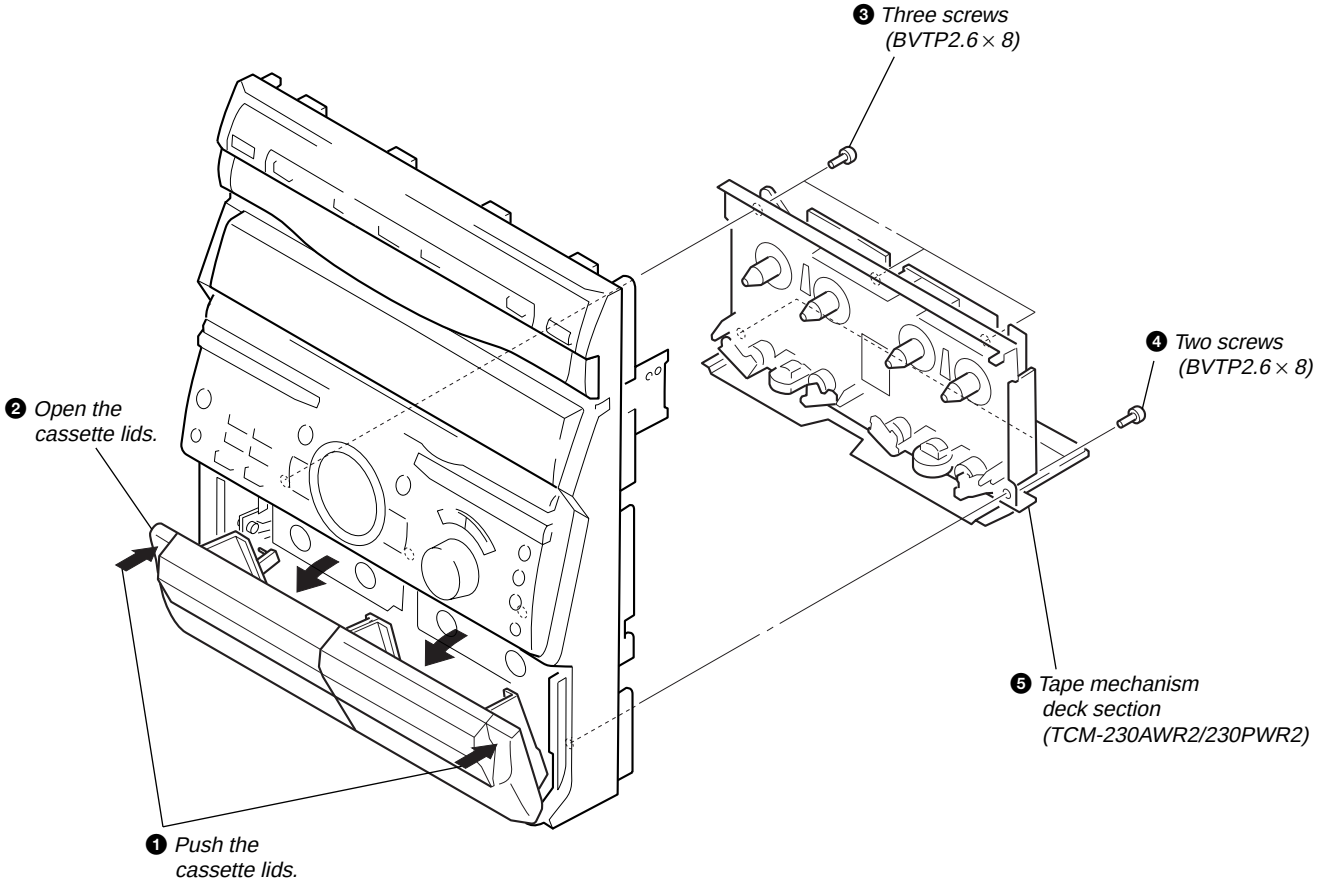
3-1. CASE



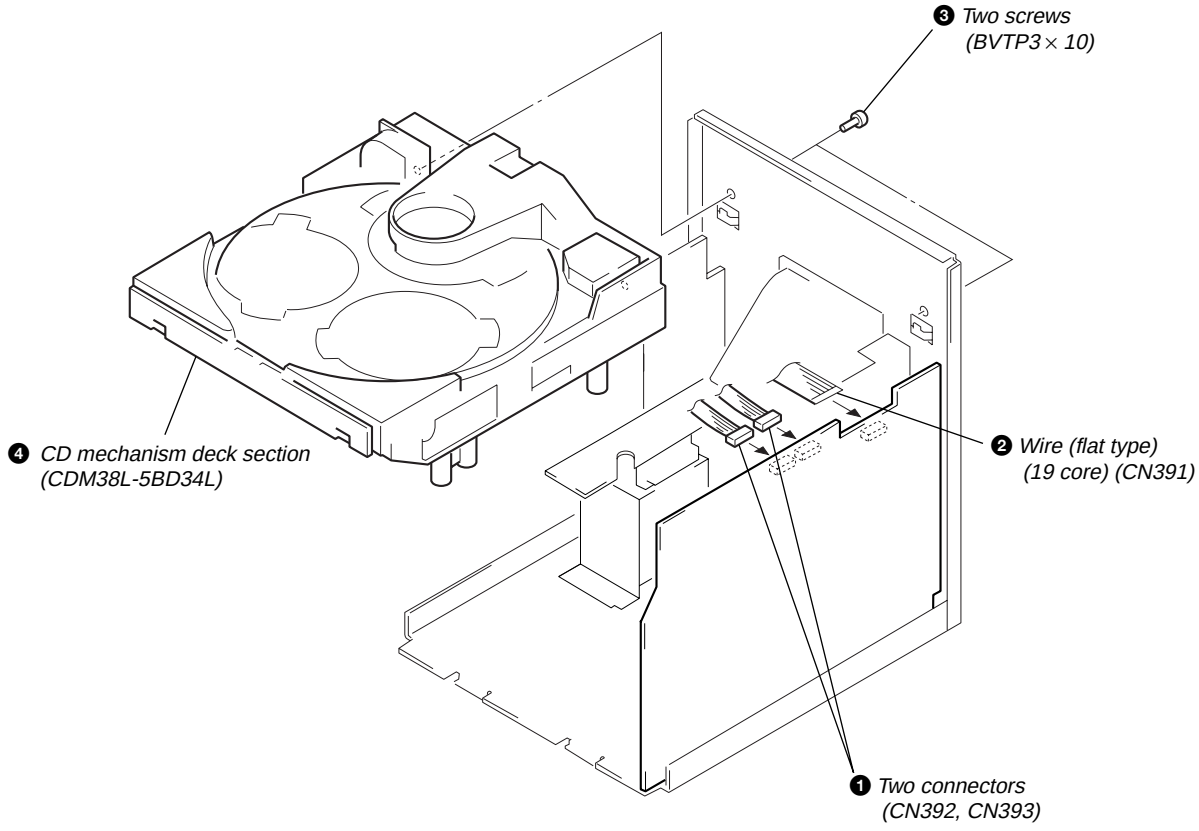
3-2. FRONT PANEL SECTION



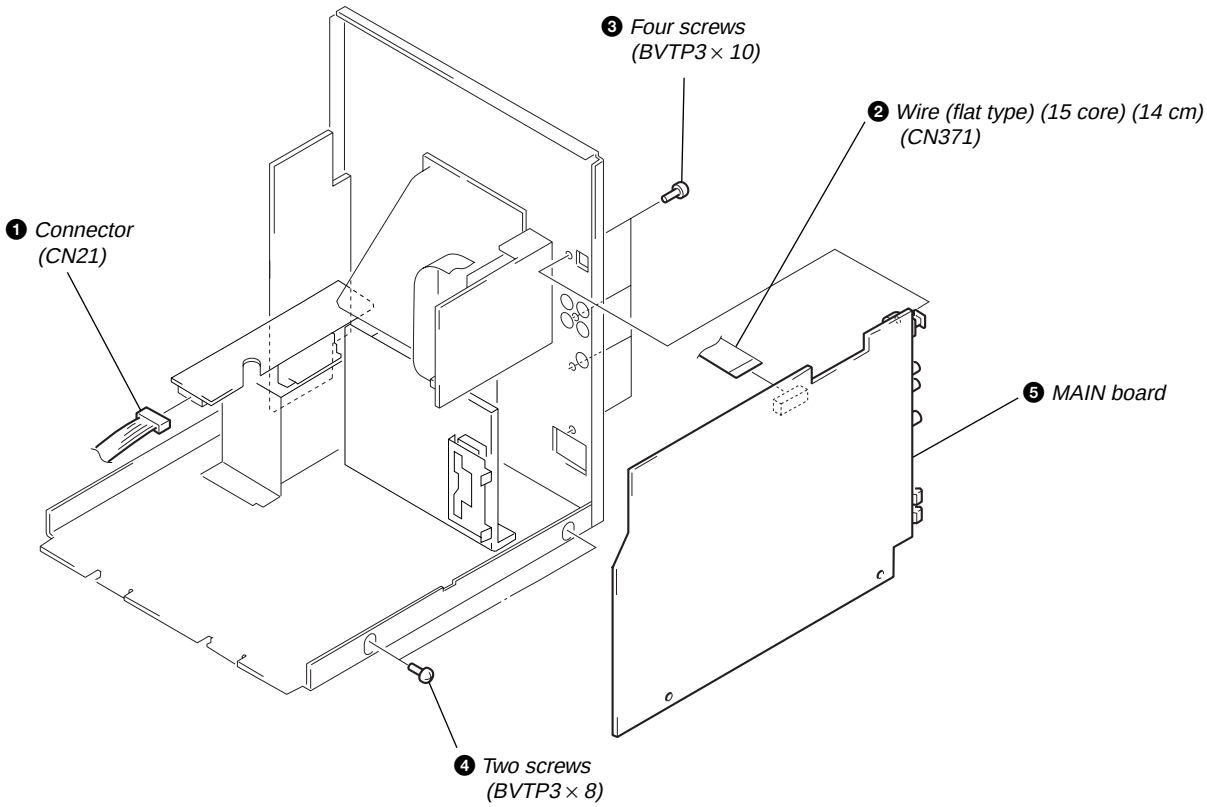
3-3. TAPE MECHANISM DECK SECTION (TCM-230AWR2/230PWR2)



3-4. CD MECHANISM DECK SECTION (CDM38L-5BD34L)



3-5. MAIN BOARD



SECTION 4
TEST MODE

[MC Cold Reset]

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [■] , [ENTER/NEXT], and [I/⏻] simultaneously.
2. The fluorescent indicator tube display "COLD RESET", and the set is reset.

[CD Delivery Mode]

• This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [CD LOOP] button and [I/⏻] button simultaneously.
3. "STANDBY" is display and blinking wait untill "LOCK" display before disconnect the AC cord.

[MC Hot Reset]

• This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [■] , [ENTER/NEXT], and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

[Sled Servo Mode]

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pickup.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "CD".
3. Press three buttons [■], [ENTER/NEXT], and [⏏] simultaneously.
4. The Sled Servo mode is selected, if "CD" is blinking on the fluorescent indicator tube.
5. With the CD in stop status, press [▶▶ +] button to move the pickup to outside track, or [– ◀◀] button to inside track.
6. To exit from this mode, perform as follows:
   1) Move the pickup to the most inside track.
   2) Press three buttons in the same manner as step 3.

Note: • Always move the pickup to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
• Do not run the sled motor excessively, otherwise the gear can be chipped.

[Change-over of MW Tuner Step between 9 kHz and 10 kHz]

• A step of MW channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "MW".
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER/NEXT] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "MW 9 k STEP" or "MW 10 k STEP", and thus the channel step is changed over.

[LED and Fluorescent Indicator Tube All Lit, Key Check Mode]

Procedure:

1. Press three buttons [■], [ENTER/NEXT], and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
   Press [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K 0 J0 V0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
   "J" value increases like 1, 2, 3 ... if rotating [JOG] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "–" direction.
   "V" value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "–" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[AMS Test Mode]

- This mode is used for checking the AMS operations of the tape deck.

JIG

7-819-039-12 Alignment tape, AMS-110A

Procedure:

1. Press the I/⏻ button to turn the unit ON.
2. Set the tape (AMS-110A).
3. Press the three buttons ■ , ENTER/NEXT , and DISC 3 button simultaneously.
4. "TEST MODE" is displayed on the fluorescent display tube.
5. Press the FUNCTION button and switch the function to the deck with the tape (AMS-110A).
6. Press the CD SYNC button. "AMS CHECK" is displayed on the fluorescent display tube and the tape is rewound.
7. AMS starts in the normal direction. If the AMS count is 2 at shut down, proceed to step 8.
   "NG" is displayed at other times, and the deck stops.
8. AMS starts in the opposite direction. If the AMS count is 2 at shut down again, "OK" is displayed.
   "NG" is displayed at other times.

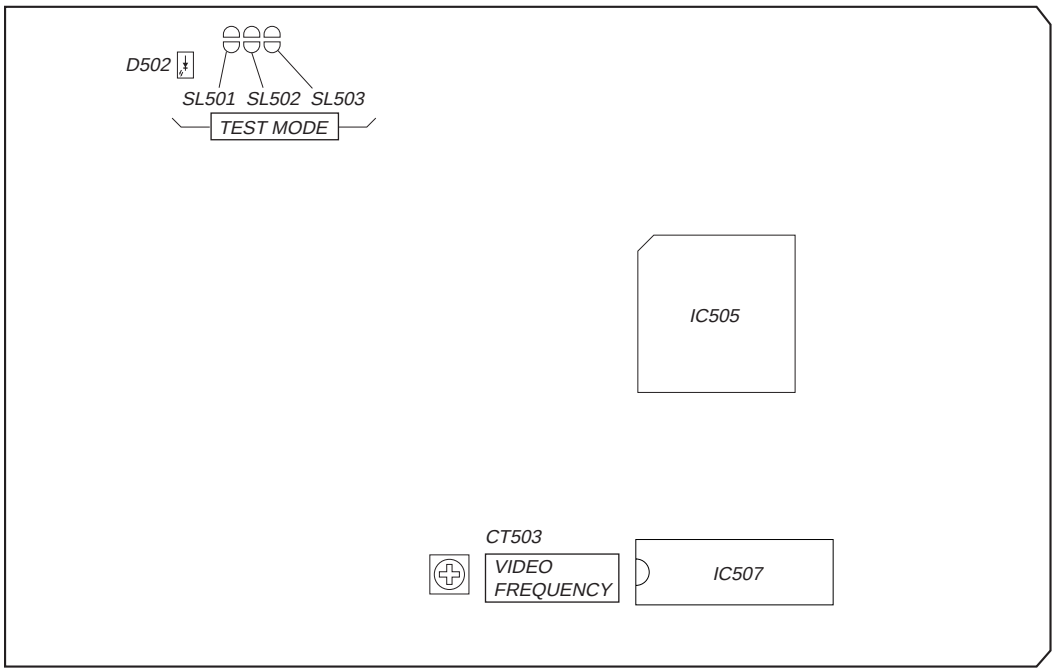
Note: The ■ button of CD section will become effective and the aging of CD section will stop sometime, if the buttons described in step 3 are not pressed simultaneously. In that case, press ▶II button and operate the CD section.

[VIDEO CD COLOR-BARS MODE]

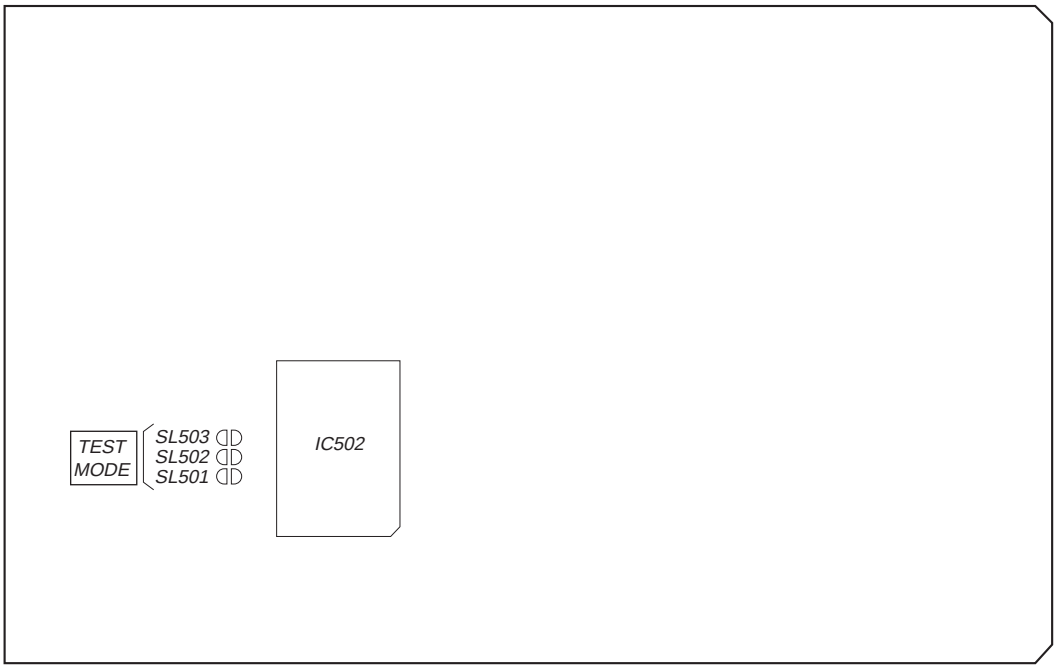
On this mode, the data of the color-bars signal as a picture signal and the 1kHz sine wave signal as a sound signal are output by the mechanism control microcomputer (IC502) for video CD signal check. When measurement of the voltage and waveform on the VIDEO board, perform it in this mode.
For refernce, the color-bars signal can be observed at J302 (VIDEO OUT) and the sound signal can be observed at J101 (VIDEO/MD (AUDIO) OUT) using an oscilloscope.

1. Connect the lead wire to both ends of the land of SL503 of the VIDEO board.
2. Turn the power on. Press FUNCTION button to select CD.
3. After 2 or 3 seconds later, connect the lead wire.
4. After measuring, remove the lead wire connected.

[VIDEO BOARD] (SIDE A)



[VIDEO BOARD] (SIDE B)



SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads, erase head, capstan, pinch rollers, rubber belts, idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION 0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

• Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

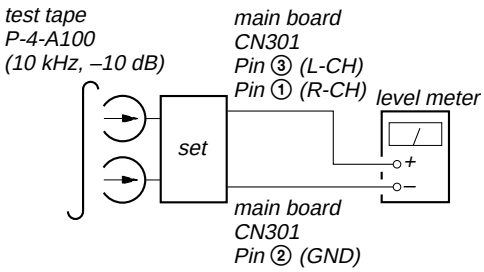
Record/Playback Head Azimuth Adjustment

DECK A **DECK B**

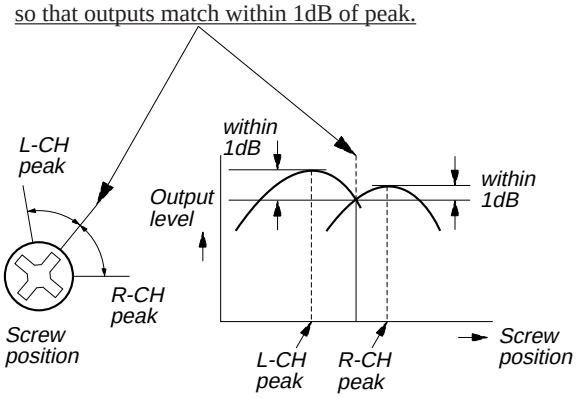
Note: Perform this adjustments for both decks

Procedure:

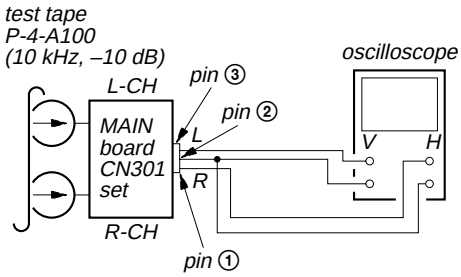
1. Mode: Playback

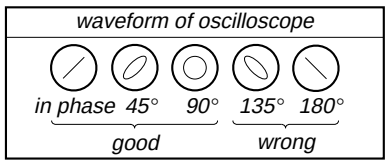


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



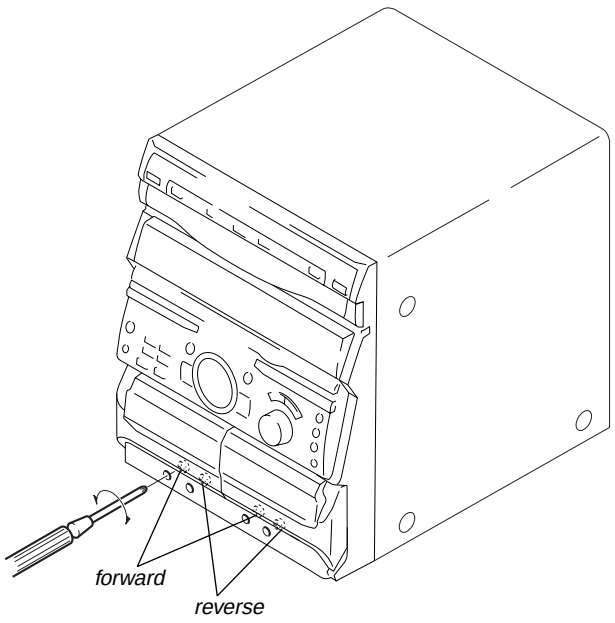
3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the pats adjusted.

Adjustment Location: Playback Head (Deck A).
Record/Playback/Erase Head (Deck B).



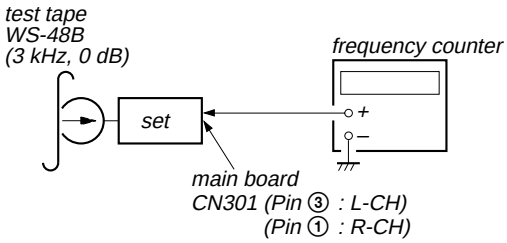
Tape Speed Adjustment DECK B

Note: Start the Tape Speed adjustment as below after setting to the test mode.
In the test mode, the tape speed is high during pressing the HI-DUB button.

Procedure:

1. Turn the power switch on.
2. Press the ■ button, ENTER/NEXT button and DISC 3 button simultaneously.
(The "VOLUME" on the fluorescent indicator tube will blink while in the test mode.)
To exit from the test mode, press the I/⏻ button.

Mode: Playback



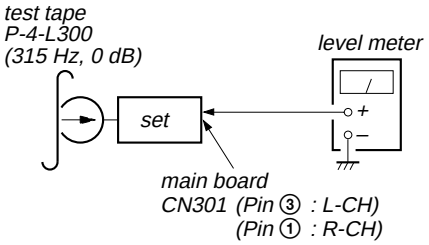
1. Insert the WS-48B into the deck B.
2. Press the ▷ button on the deck B.
3. Press the HI-DUB button in playback mode.
Then at HIGH speed mode.
4. Adjust RV1001 on the LEAF SW board do that frequency counter reads 6,000 ± 180 Hz.
5. Press the HI-DUB button.
Then back to NORMAL speed mode.
6. Adjust RV1002 on the LEAF SW board so that frequency counter reads 3,000 ± 90 Hz.

Adjustment Location: LEAF SW board

Playback level Adjustment DECK A DECK B

Procedure:

Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), Deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level:

CN301 PB level: 301.5 to 338.3 mV (–8.2 to –7.2 dB) level difference between the channels: within ±0.5 dB

Adjustment Location: AUDIO board

Sample Volue of Wow and Flutter: 0.3% or less W. RMS
(WS-48B)

REC Bias Adjustment DECK B

Procedure:

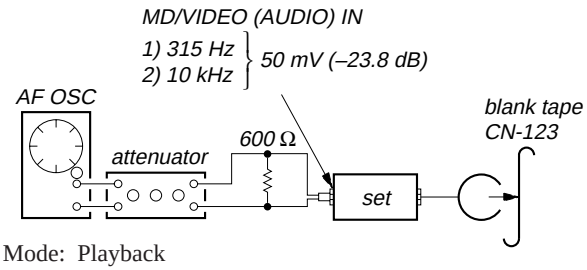
INTRODUCTION

When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

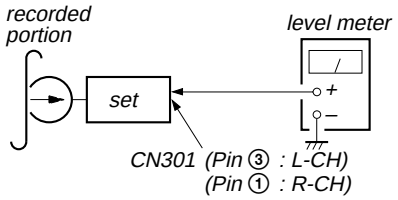
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(If do not operation of stopped from recording complete, and press [– ◀◀] button then rewind to recording start position.)

1. Press FUNCTION button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press [● REC] button, press [❚❚] button, then recording start.
4. Mode: Record



5. Mode: Playback



6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 4 and 5.

Adjustable level: Playback output of 315 Hz to playback output of 10 kHz: ±1.0 dB

Adjustment Location: AUDIO board

REC Level Adjustment DECK B

Procedure:

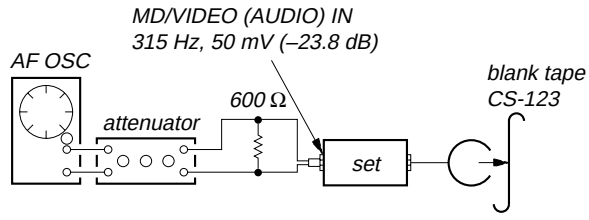
INTRODUCTION

When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

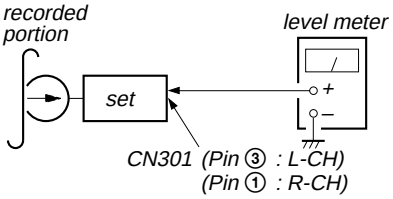
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(If do not operation of stopped from recording complete, and press [– ◀◀] button then rewind to recording start position.)

1. Press [FUNCTION] button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press [● REC] button, press [❚❚] button, then recording start.
4. Mode: Record



5. Mode: Playback



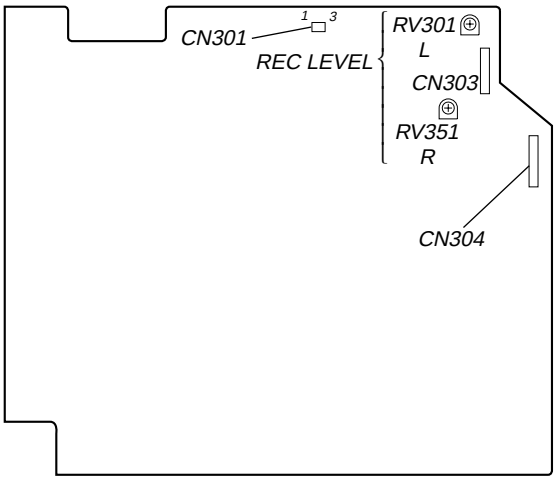
6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 4 and 5.

Adjustable level:

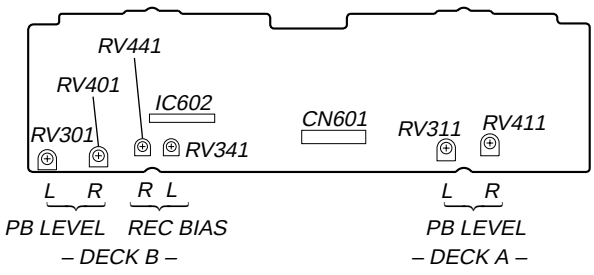
CN301 PB level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

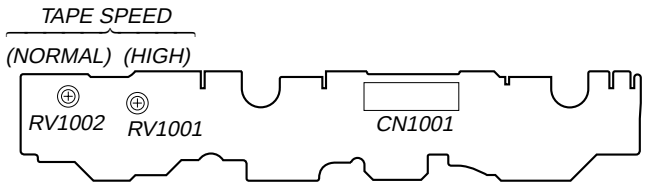
[MAIN BOARD] (Component Side)



[AUDIO BOARD] (Component Side)



[LEAF SW BOARD] (Component Side)

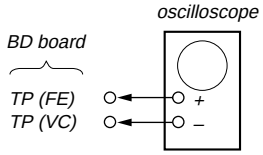


CD SECTION

Note:

1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check

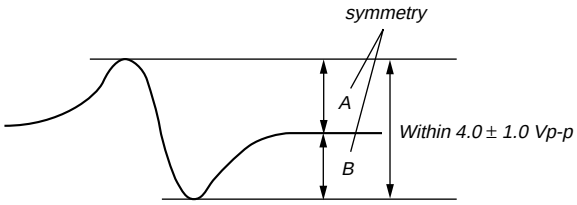


Adjustment Location: BD board

Procedure :

1. Connect the oscilloscope to test points TP (FE) and TP (VC).
2. Connect TP (FEI) and GND, and TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. With the disc (YEDS-18) loaded, press the ▶II button and perform focus search. (Focus search will be performed in the same way even while the disc table is pushed in and out.)
5. Check the symmetry and peak to peak level of the oscilloscope waveform (S curve) at this time.

S-curve waveform

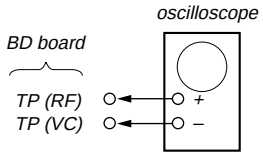


6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Adjustment Location: BD board

RF Level Check

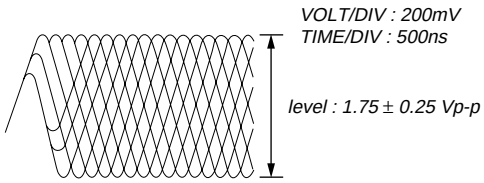


Procedure :

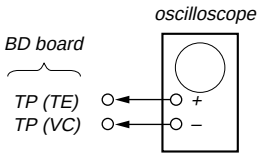
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Connect TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. Put disc (YEDS-18) in and playback 5track.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



E-F Balance (Traverse) Check

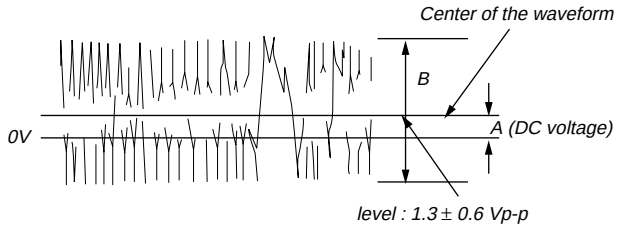


Adjustment Location: BD board

Procedure :

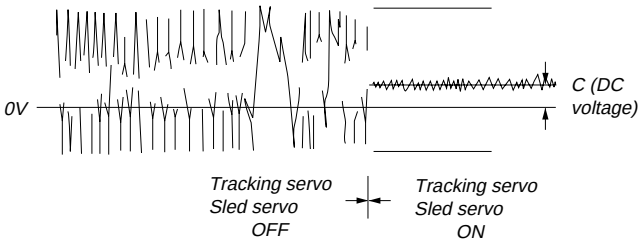
1. Connect oscilloscpe to test point TP (TE) on BD board.
2. Short-circuit SL502 of the video board to GND.
3. Turned Power switch on. Press FUNCTION button to select CD.
4. Put disc (YEDS-18) in to play the number five track.
5. Press the PLAY MODE/DOLBY NR button. (The tracking servo and the sledding servo are turned OFF.)
6. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 22%

Traverse waveform



7. Press the PLAY MODE/DOLBY NR button. (The tracking servo and sledding servo are turned ON.) Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 7.

Traverse waveform

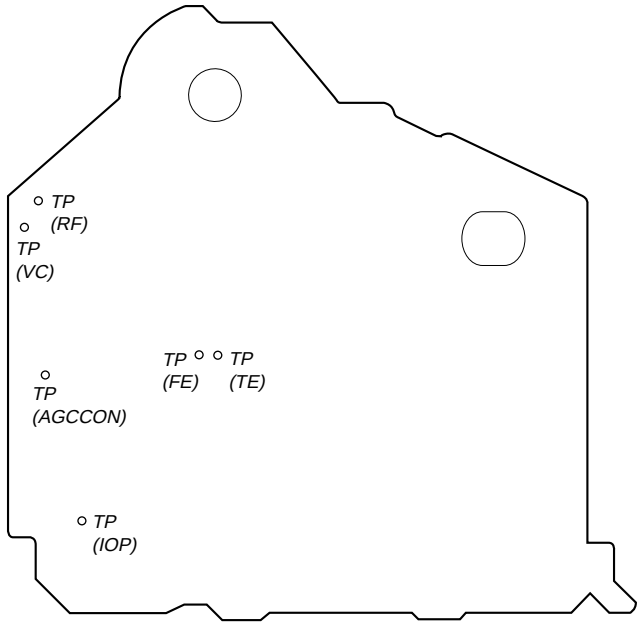


8. Desolder the short-land (SL502) short-circuited at step 2.

Adjustment Location: BD board

Adjustment Location :

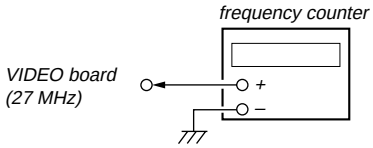
[BD BOARD] — SIDE B —



VIDEO SECTION

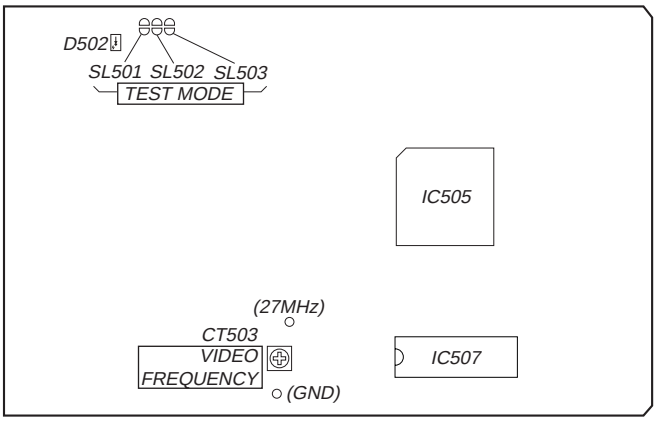
Frequency adjustment

1. Connect the frequency counter to check point of the VIDEO board.
2. Adjust CT503 of the VIDEO board so that the frequency counter read 27MHz ± 80Hz at STOP condition.

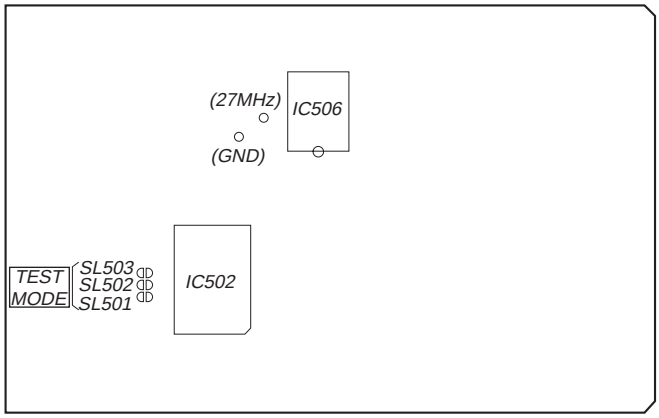


Adjustment Location :

[VIDEO BOARD] – SIDE A –

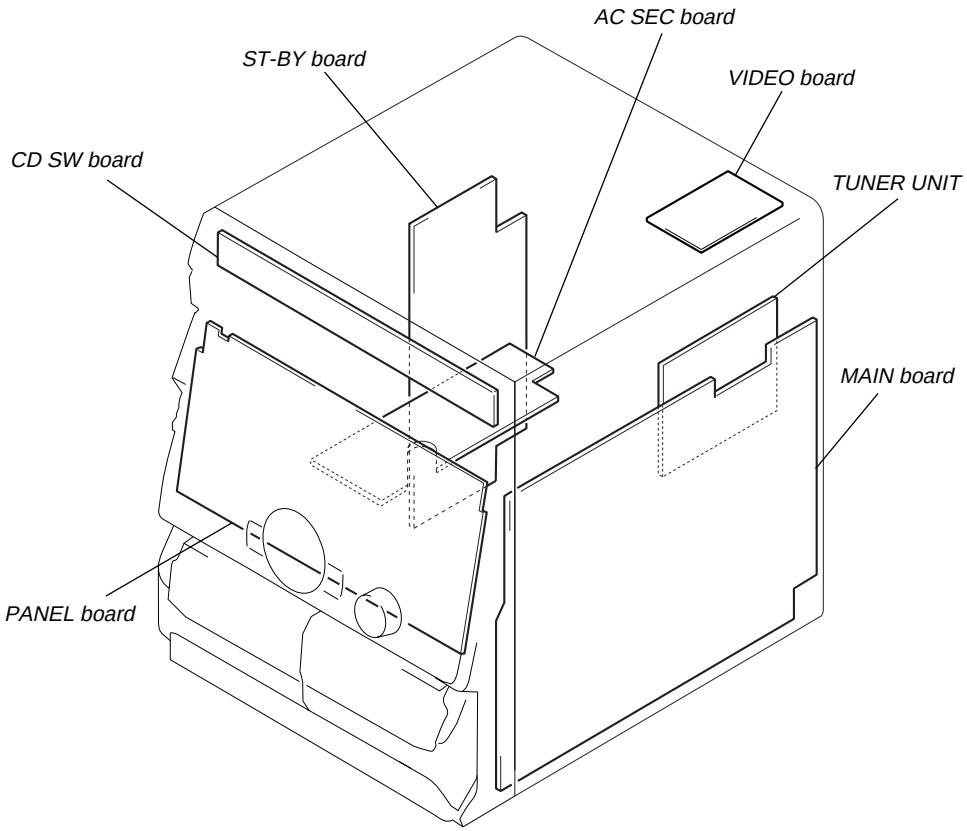


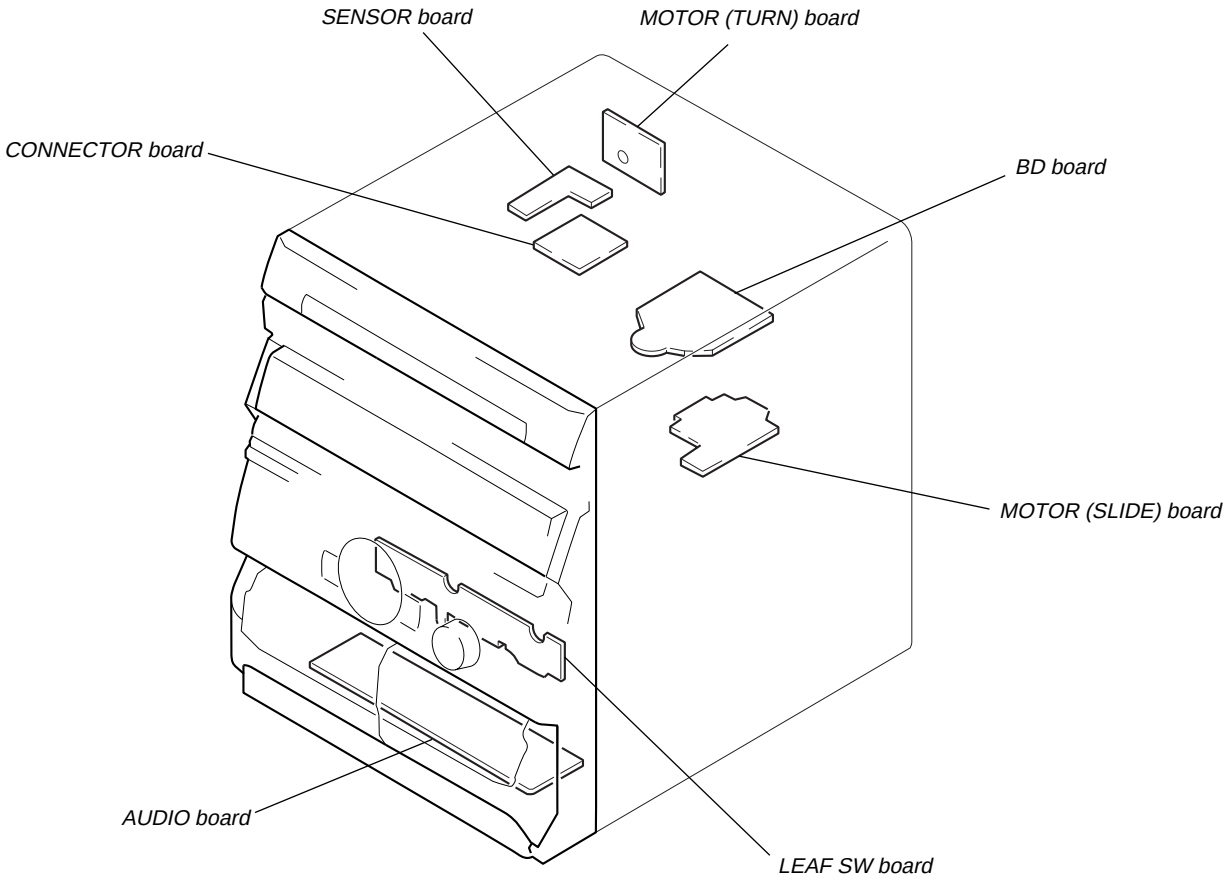
[VIDEO BOARD] – SIDE B –



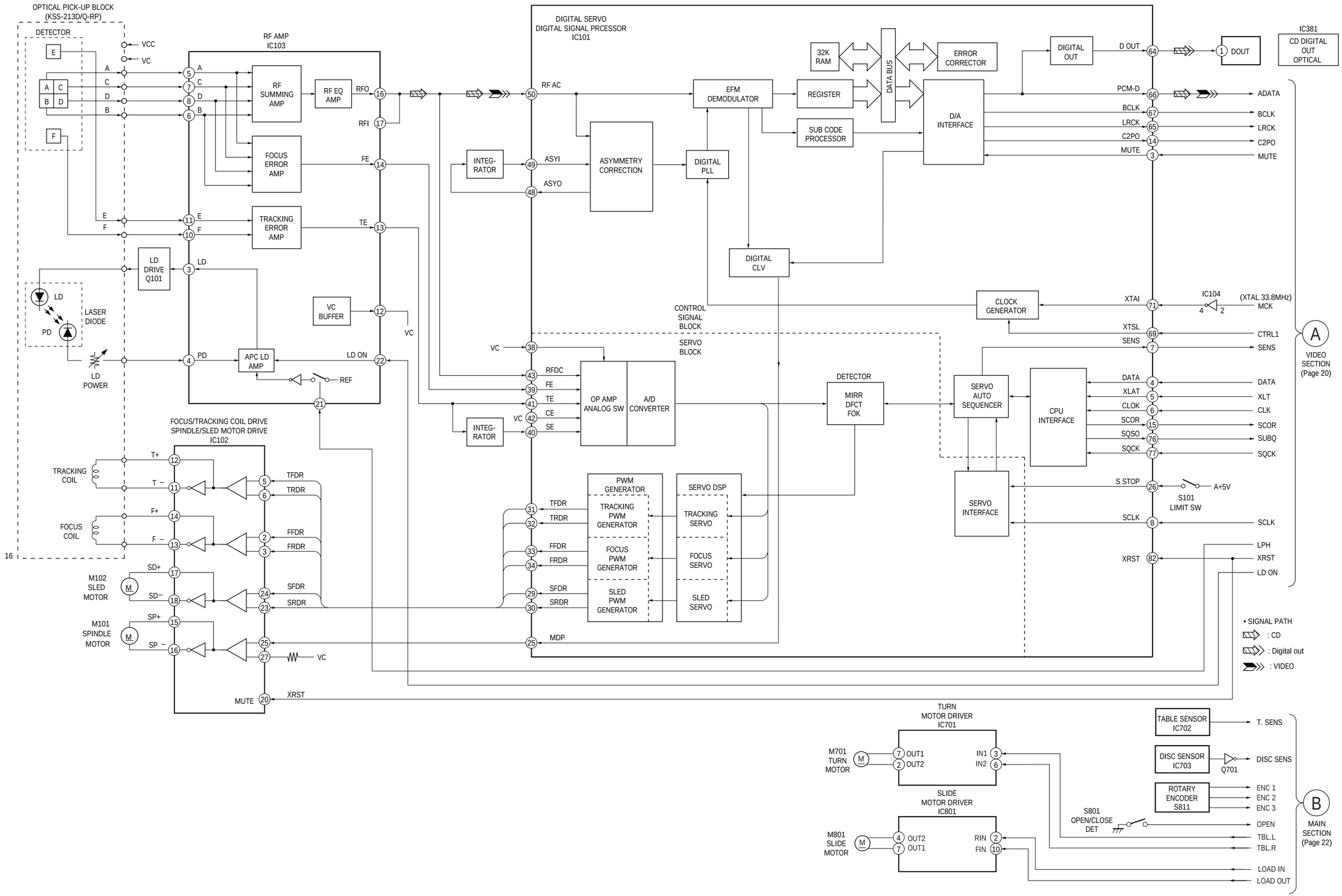
SECTION 7
DIAGRAMS

7-1. CIRCUIT BOARD LOCATION

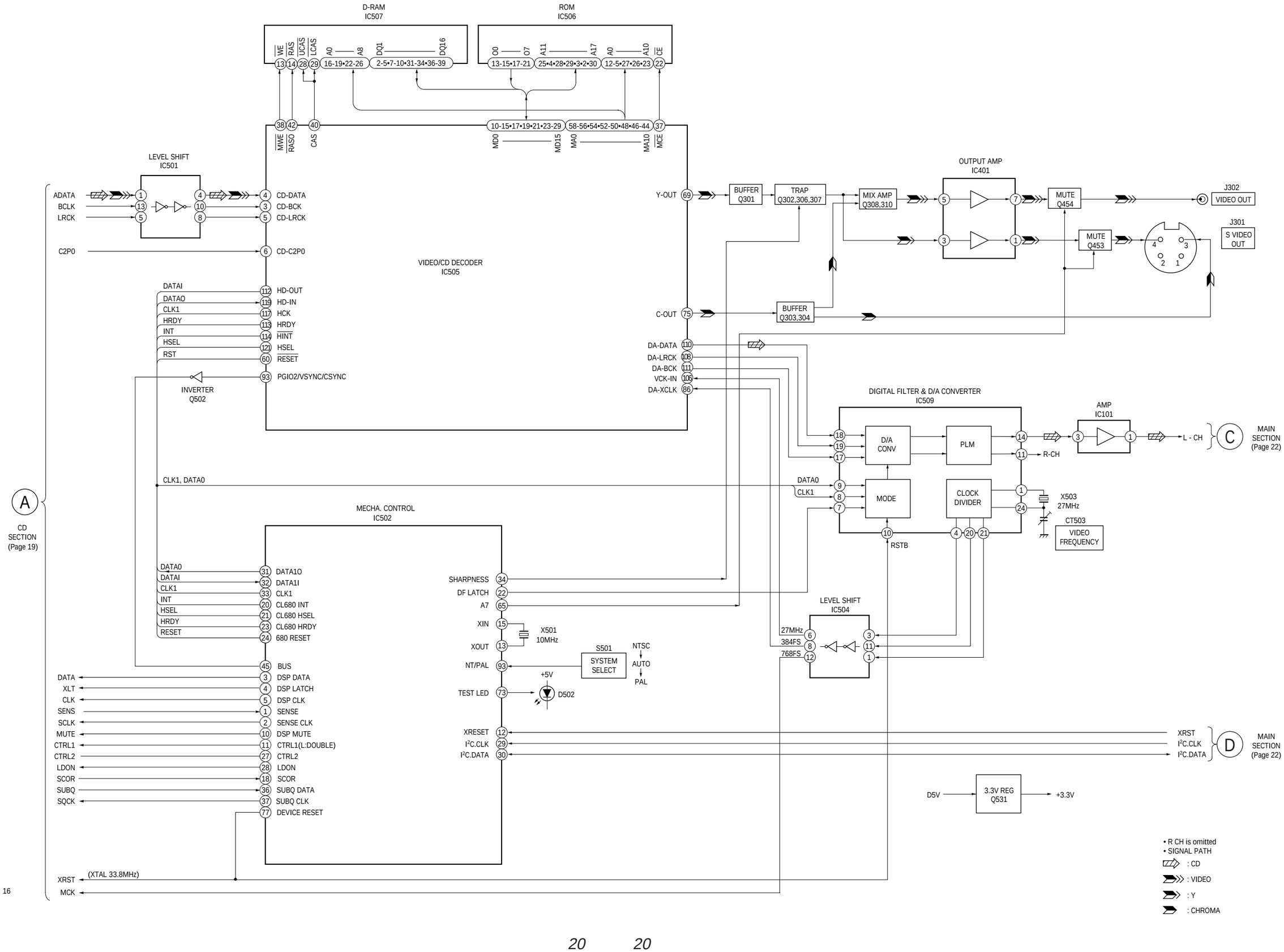




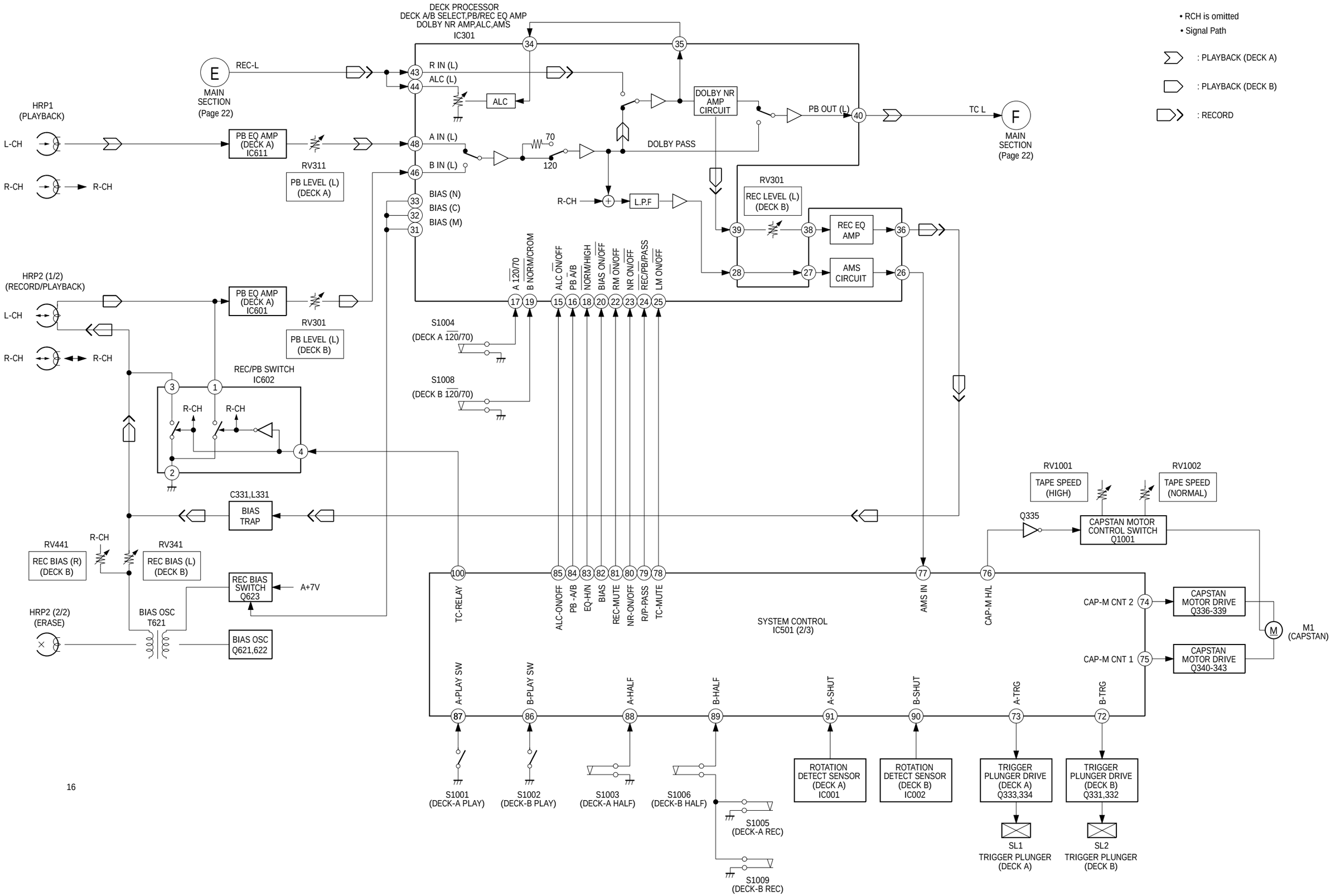
7-2. BLOCK DIAGRAMS CD SECTION



VIDEO SECTION



TAPE DECK SECTION



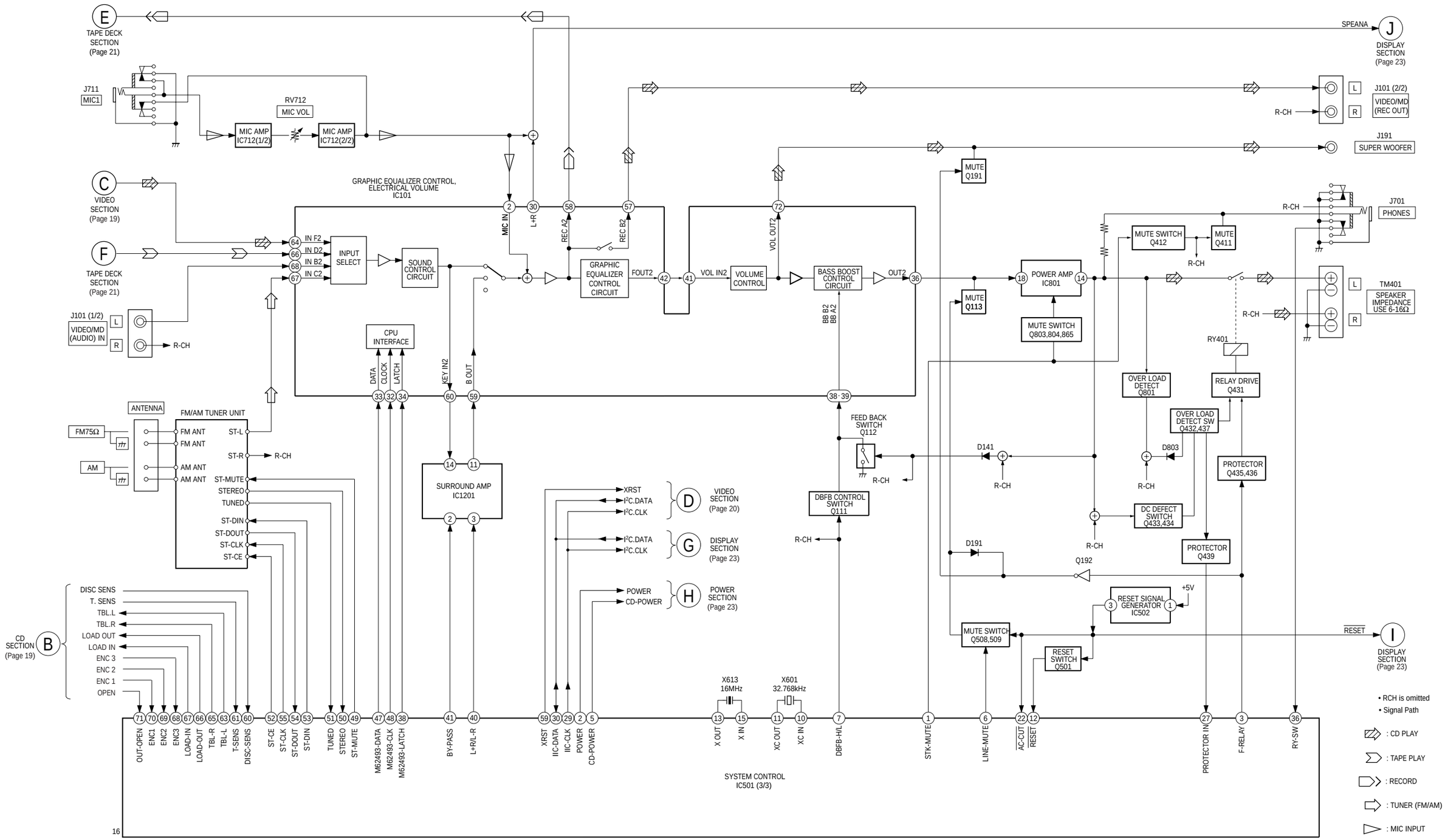
- RCH is omitted
- Signal Path

: PLAYBACK (DECK A)

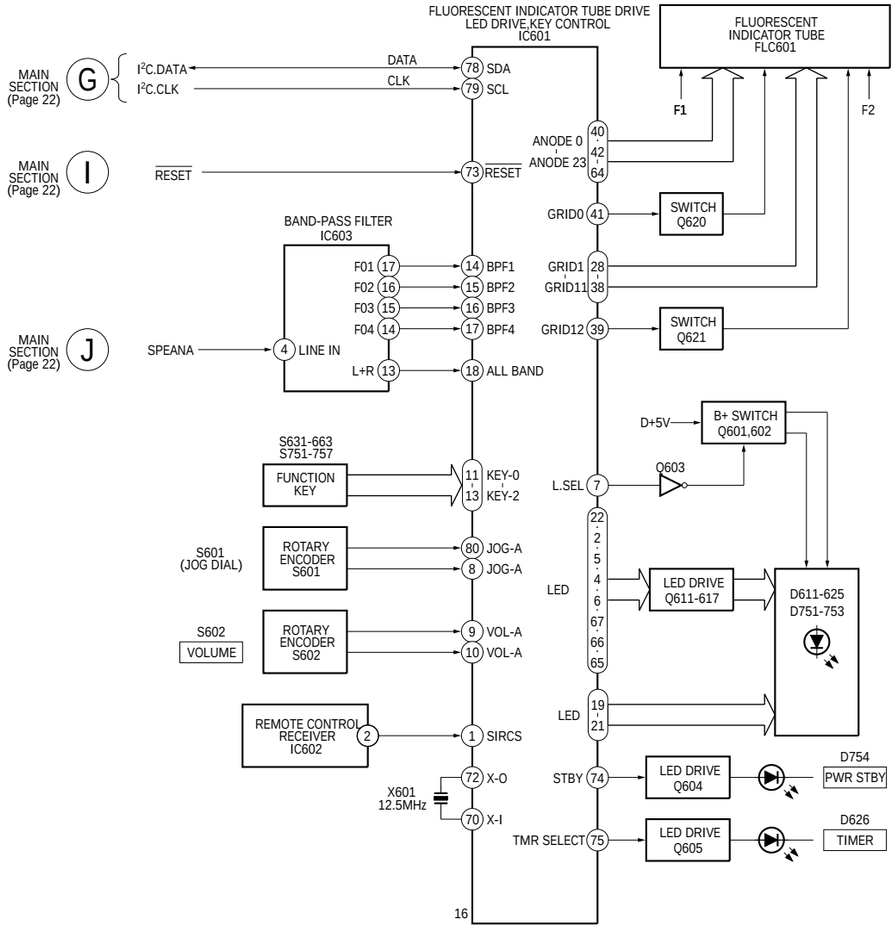
: PLAYBACK (DECK B)

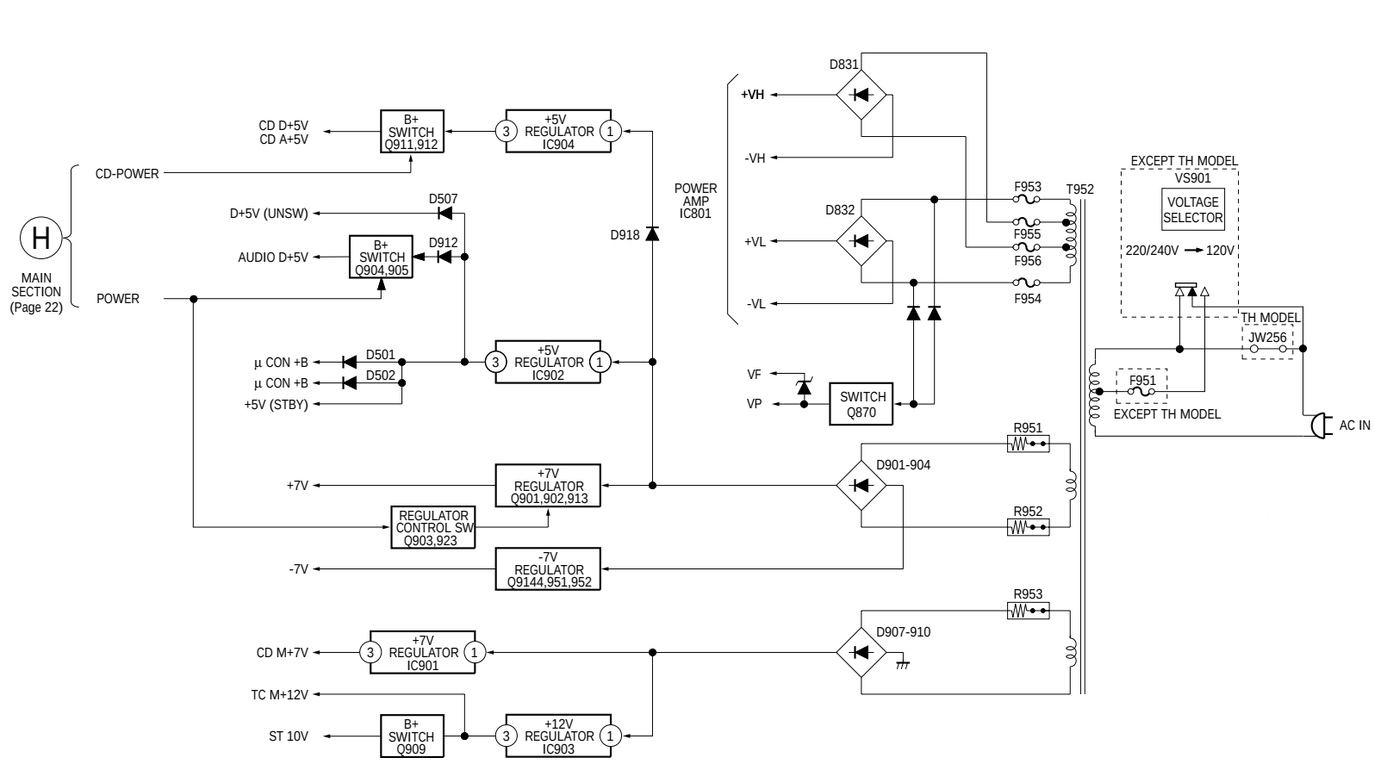
: RECORD

MAIN SECTION



DIPLAY/KEY/POWER SECTION





THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- B− : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : VIDEO/MD
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)
  - : CHROMA
  - : Y
  - : VIDEO
  - : CD
  - : digital out
- Abbreviation
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - SP : Singapore model
  - IA : Indonesia model
  - TH : Thai model
  - TW : Taiwan model
  - JE : Tourist model

For printed wiring boards.

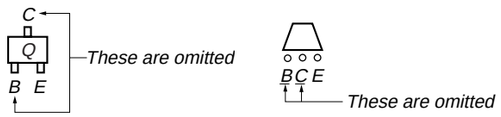
Note:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▒▒ : Pattern from the side which enables seeing.

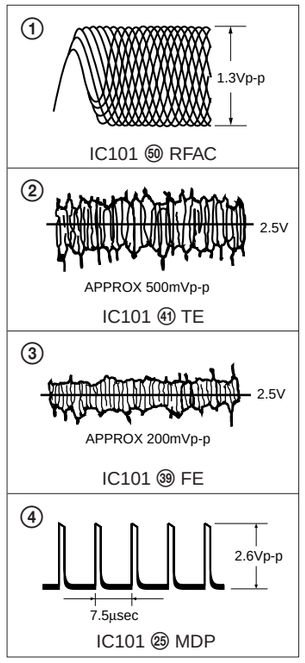
(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

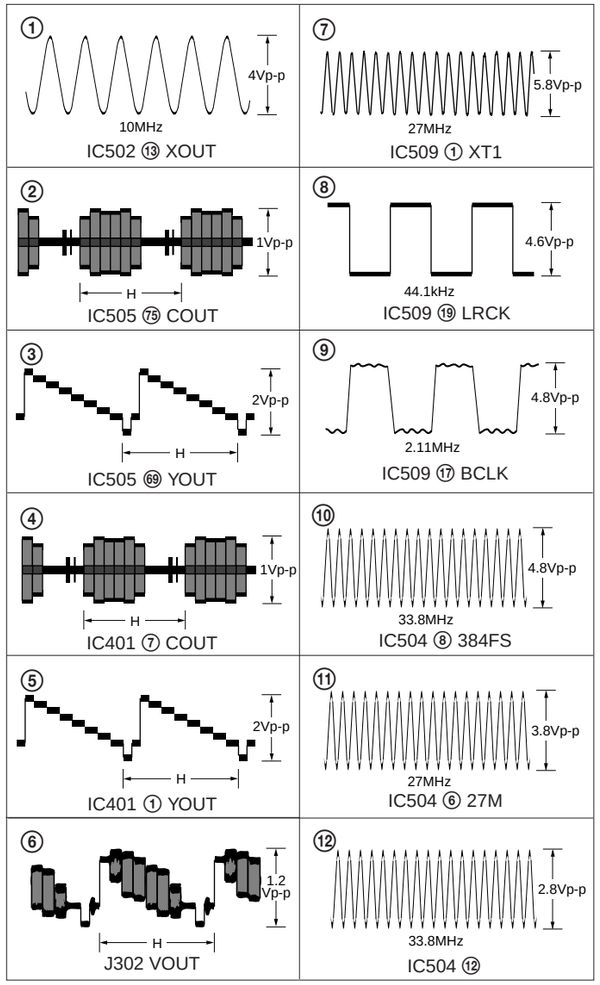
- **Indication of transistor**



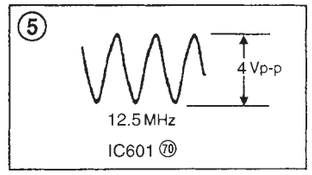
Waveforms
CD SECTION



VIDEO SECTION

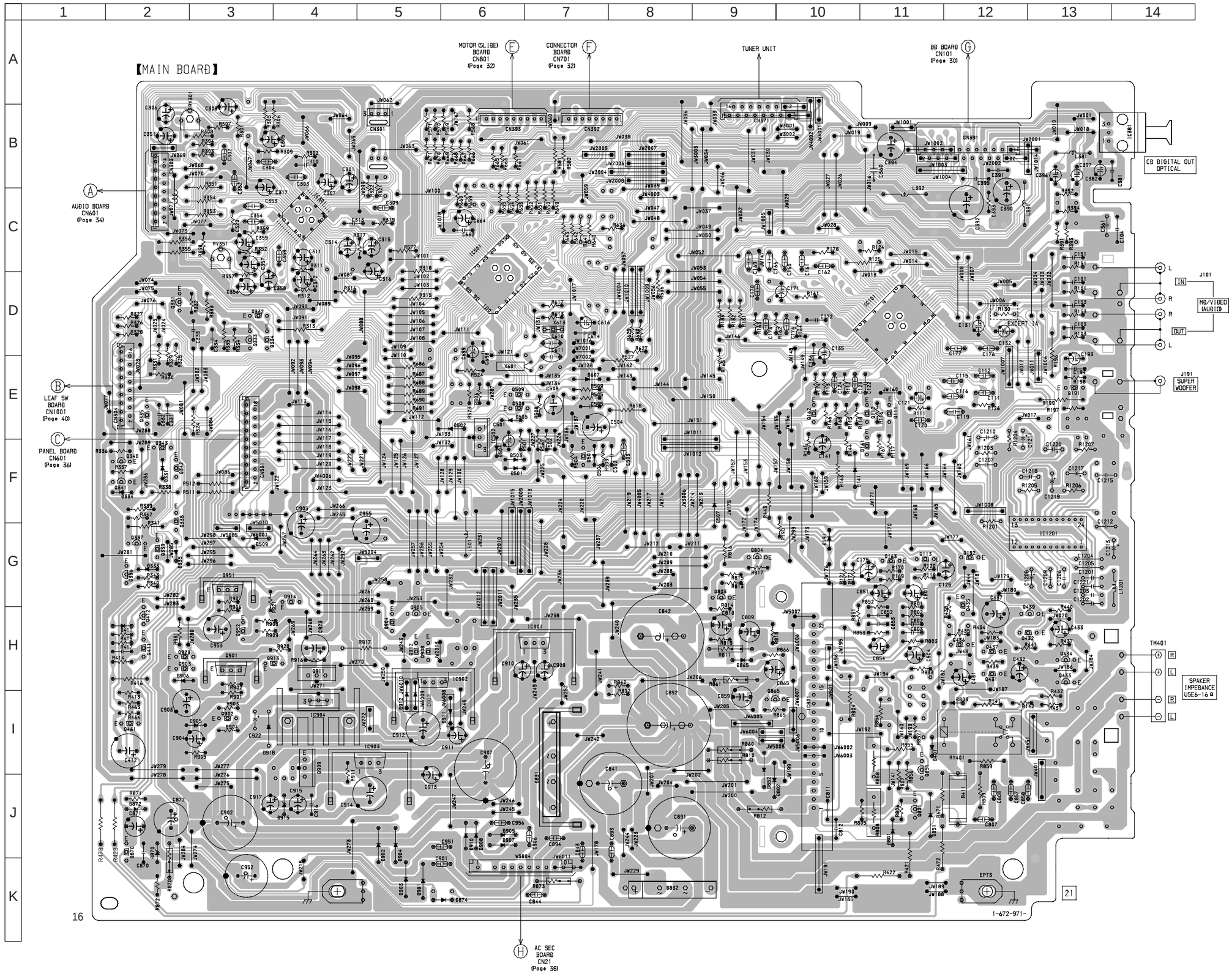


PANEL SECTION



7-3. PRINTED WIRING BOARD MAIN SECTION

• Refer to page 18 for Circuit Boards Location.

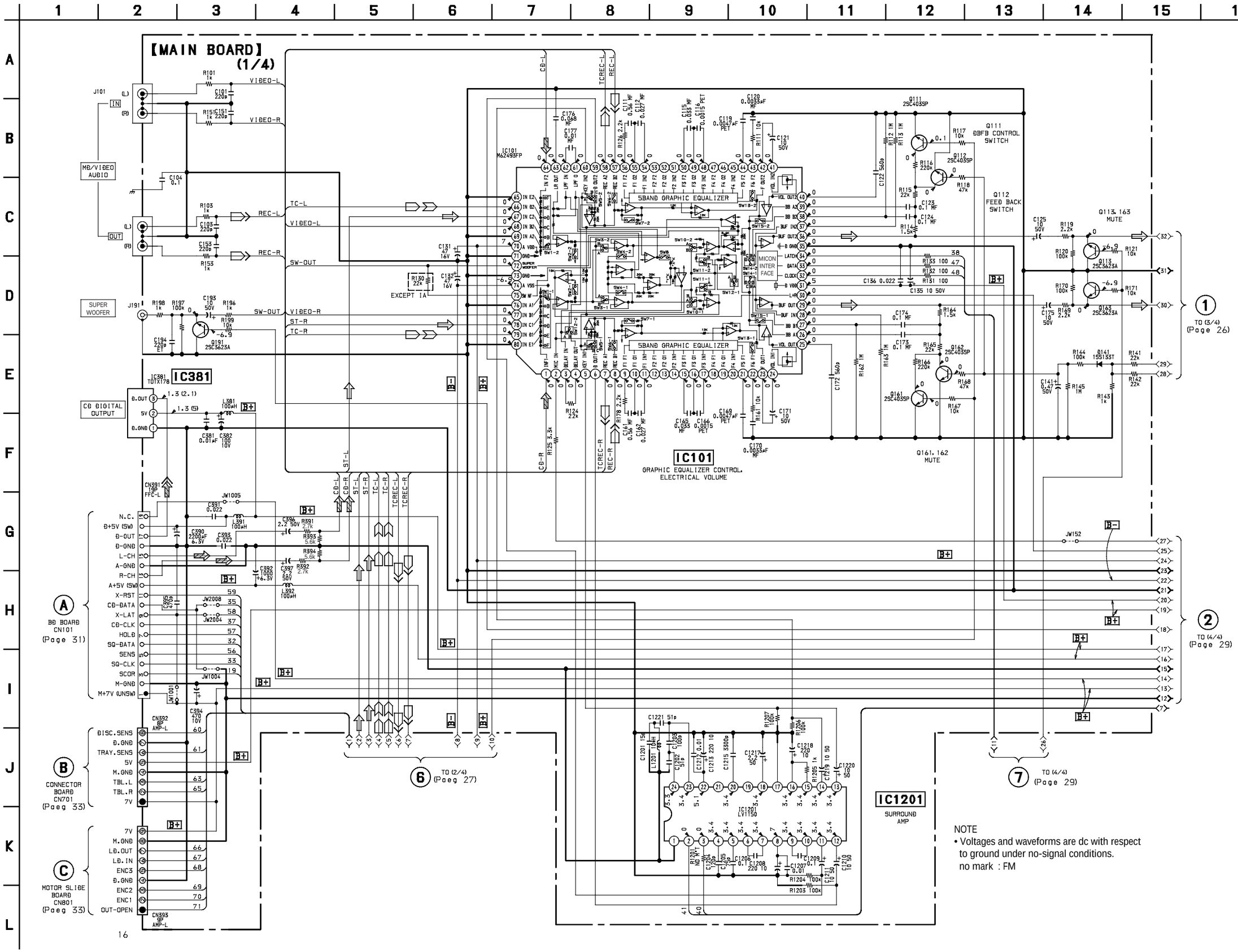


• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D141	F-11	Q111	E-11
D191	G-10	Q112	E-11
D331	F-2	Q113	G-11
D333	G-2	Q161	E-11
D334	F-2	Q162	E-10
D335	G-2	Q163	G-11
D401	I-11	Q191	E-13
D411	H-2	Q192	G-12
D501	F-6	Q331	D-2
D502	E-6	Q332	D-3
D503	F-6	Q333	D-3
D504	F-6	Q334	D-3
D505	E-6	Q335	E-2
D506	F-7	Q336	G-2
D507	F-9	Q337	G-2
D509	G-3	Q338	F-2
D607	E-7	Q339	G-2
D801	J-11	Q340	F-2
D802	J-10	Q341	F-2
D803	I-12	Q342	F-2
D831	I-7	Q343	F-2
D832	K-8	Q411	H-2
D851	J-11	Q412	H-2
D852	I-9	Q431	H-12
D865	H-9	Q432	H-13
D870	J-2	Q433	H-13
D872	J-2	Q434	H-13
D874	K-6	Q435	G-12
D901	K-5	Q436	H-12
D902	J-5	Q437	H-12
D903	K-5	Q439	G-13
D904	J-5	Q461	I-2
D905	I-3	Q501	F-7
D906	H-3	Q508	E-6
D907	J-6	Q509	E-6
D908	J-6	Q801	J-11
D909	J-6	Q803	G-9
D910	J-6	Q804	G-9
D911	I-6	Q851	I-11
D912	I-5	Q865	H-9
D913	I-5	Q870	J-2
D915	J-4	Q901	H-3
D918	I-4	Q902	I-3
		Q903	H-3
IC101	D-11	Q904	H-5
IC301	C-4	Q905	H-5
IC381	B-14	Q909	I-4
IC501	C-6	Q911	H-4
IC502	E-6	Q912	H-5
IC801	I-10	Q913	H-4
IC901	H-7	Q914	G-4
IC902	H-5	Q923	H-3
IC903	I-5	Q951	G-3
IC904	I-4	Q952	H-3
IC1201	G-13		

7-4. SCHEMATIC DIAGRAM MAIN SECTION (1/4)

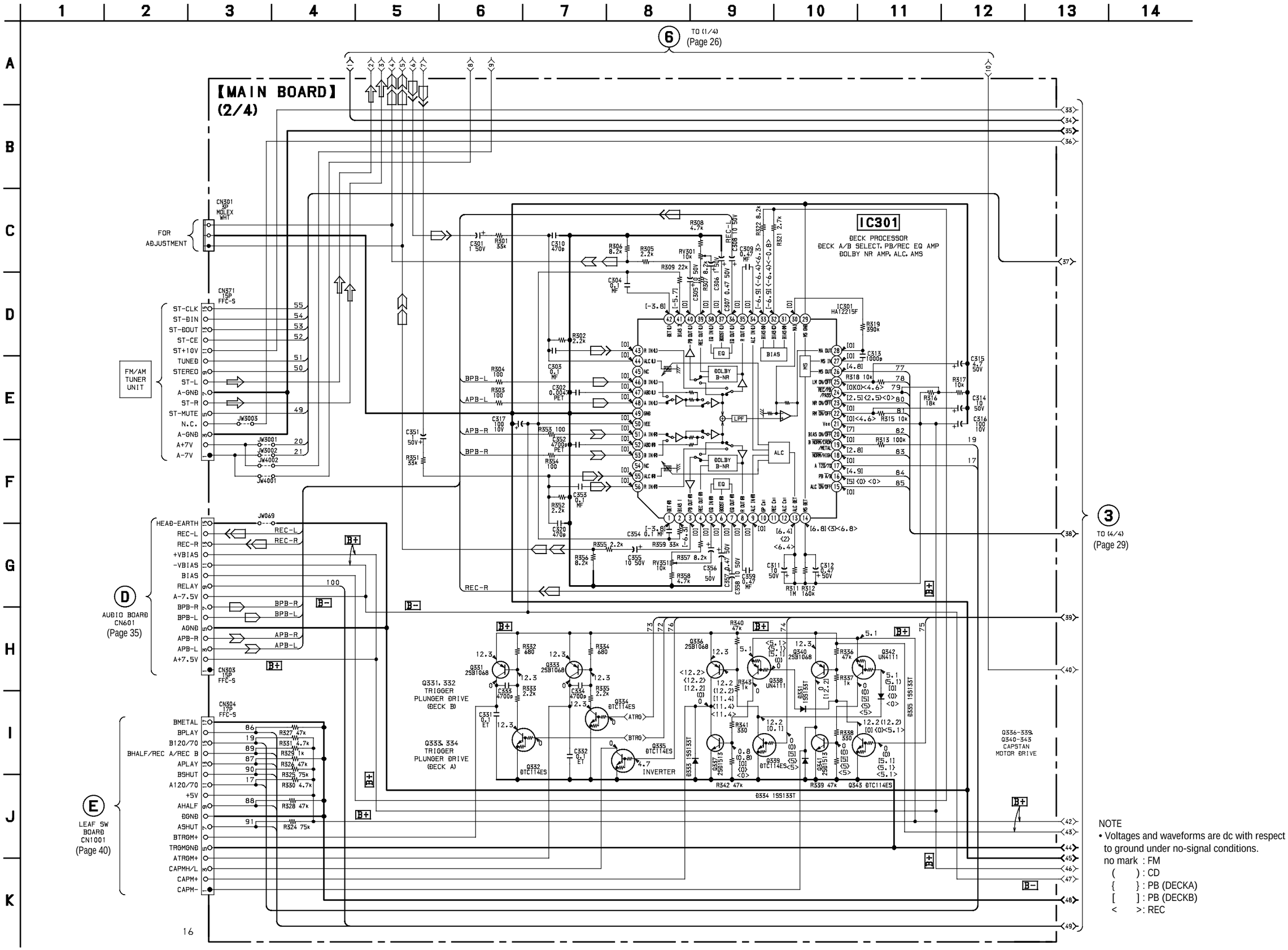
• Refer to page 25 for Printed Wiring Board.



NOTE
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM

7-5. SCHEMATIC DIAGRAM MAIN SECTION (2/4)

• Refer to page 25 for Printed Wiring Board.



NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : CD
  { } : PB (DECKA)
  [ ] : PB (DECKB)
  < > : REC

7-6. SCHEMATIC DIAGRAM MAIN SECTION (3/4)

• Refer to page 25 for Printed Wiring Board.

【MAIN BOARD】
(3/4)

IC801
POWER AMP
IC801
IC STK411-210E

Q803,804,865
MUTE SWITCH

Q432,437
OVER LOAD
DETECT SWITCH

Q433,434
DC DEFECT SWTICH

Q435,436
PROTECTOR

Q411,412,461
MUTE SWITCH

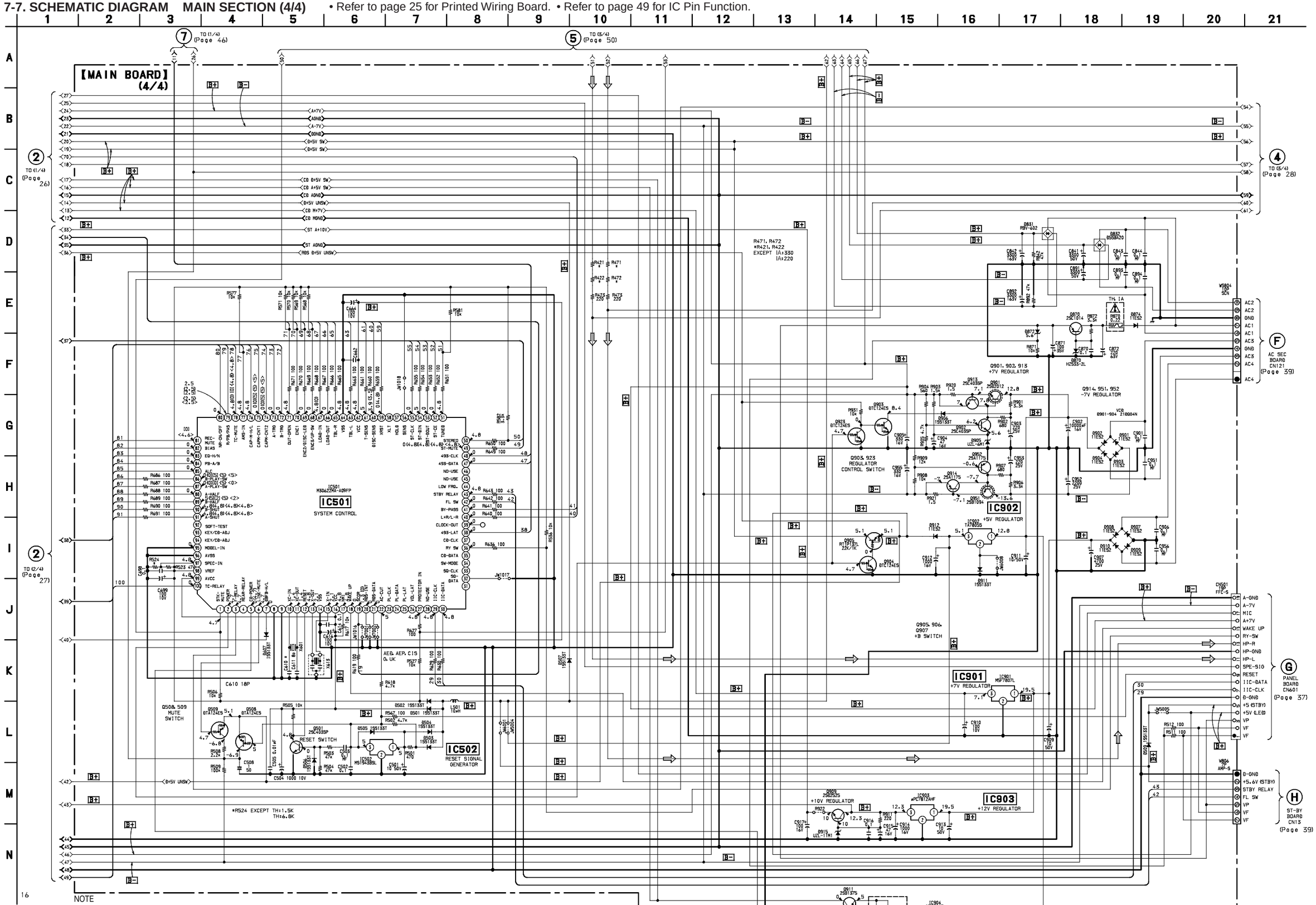
TM401
SPEAKER
IMPEDANCE
USE 6-16Ω

NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : FM
* : Can not measured.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-7. SCHEMATIC DIAGRAM MAIN SECTION (4/4)

• Refer to page 25 for Printed Wiring Board. • Refer to page 49 for IC Pin Function.

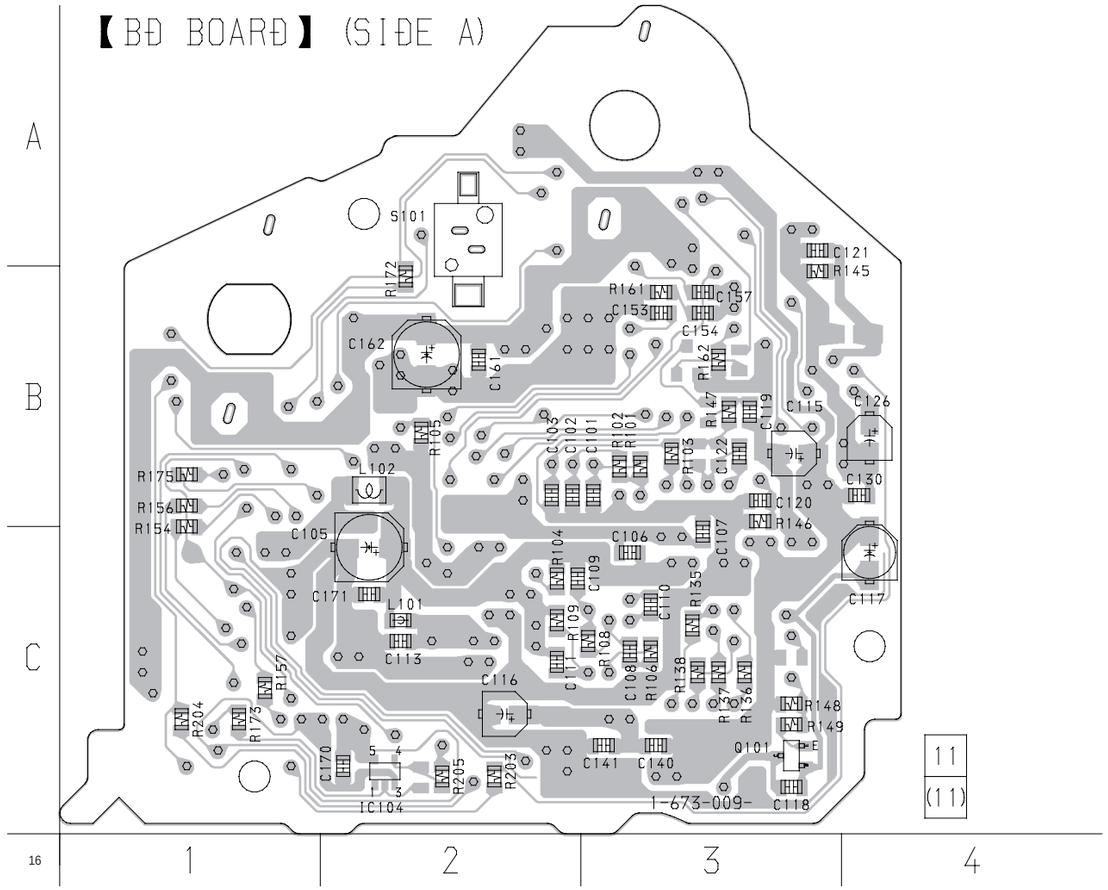


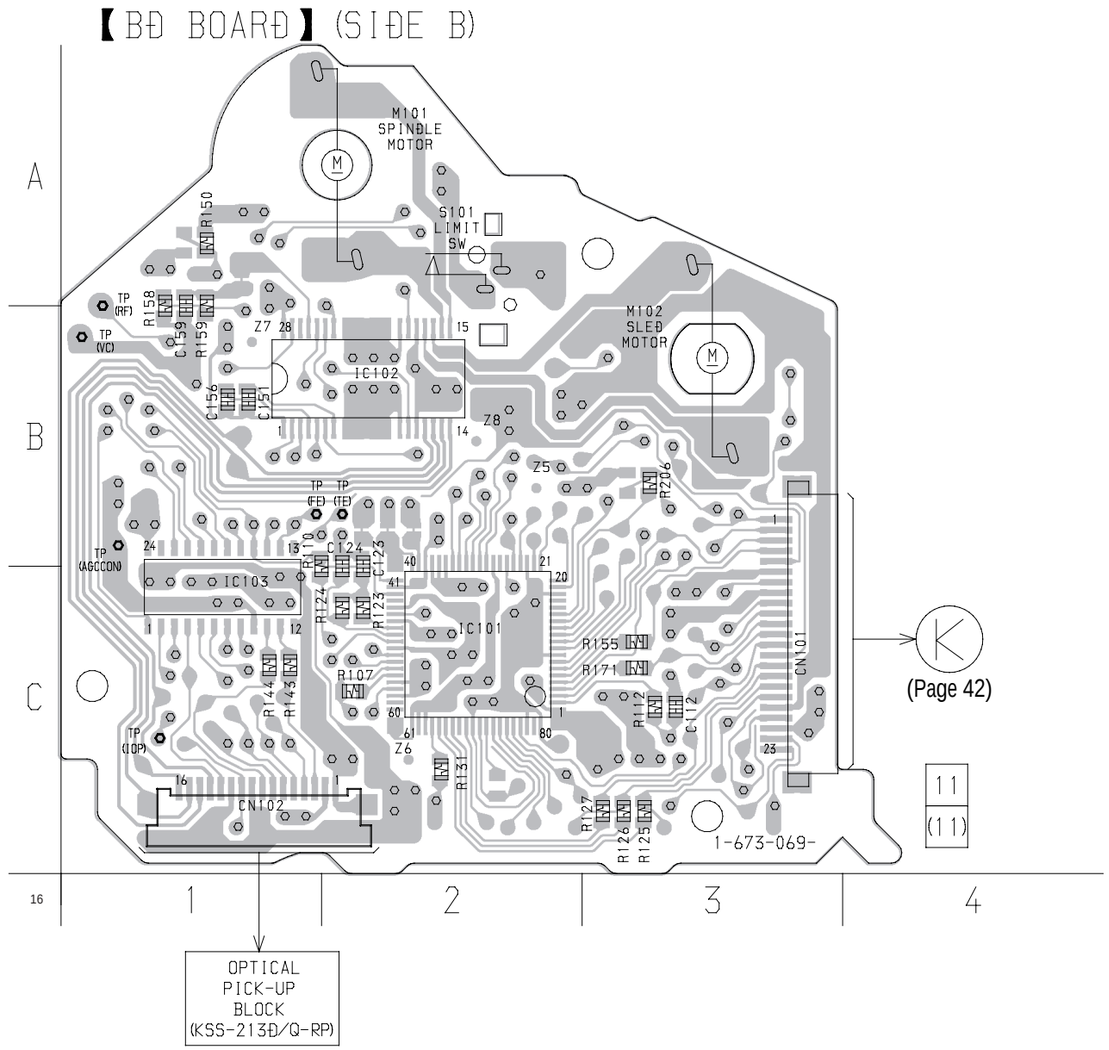
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : FM
  ( ) : CD
  { } : PB (DECKA)
  [ ] : PB (DECKB)
  < > : REC

7-8. PRINTED WIRING BOARD CD SECTION

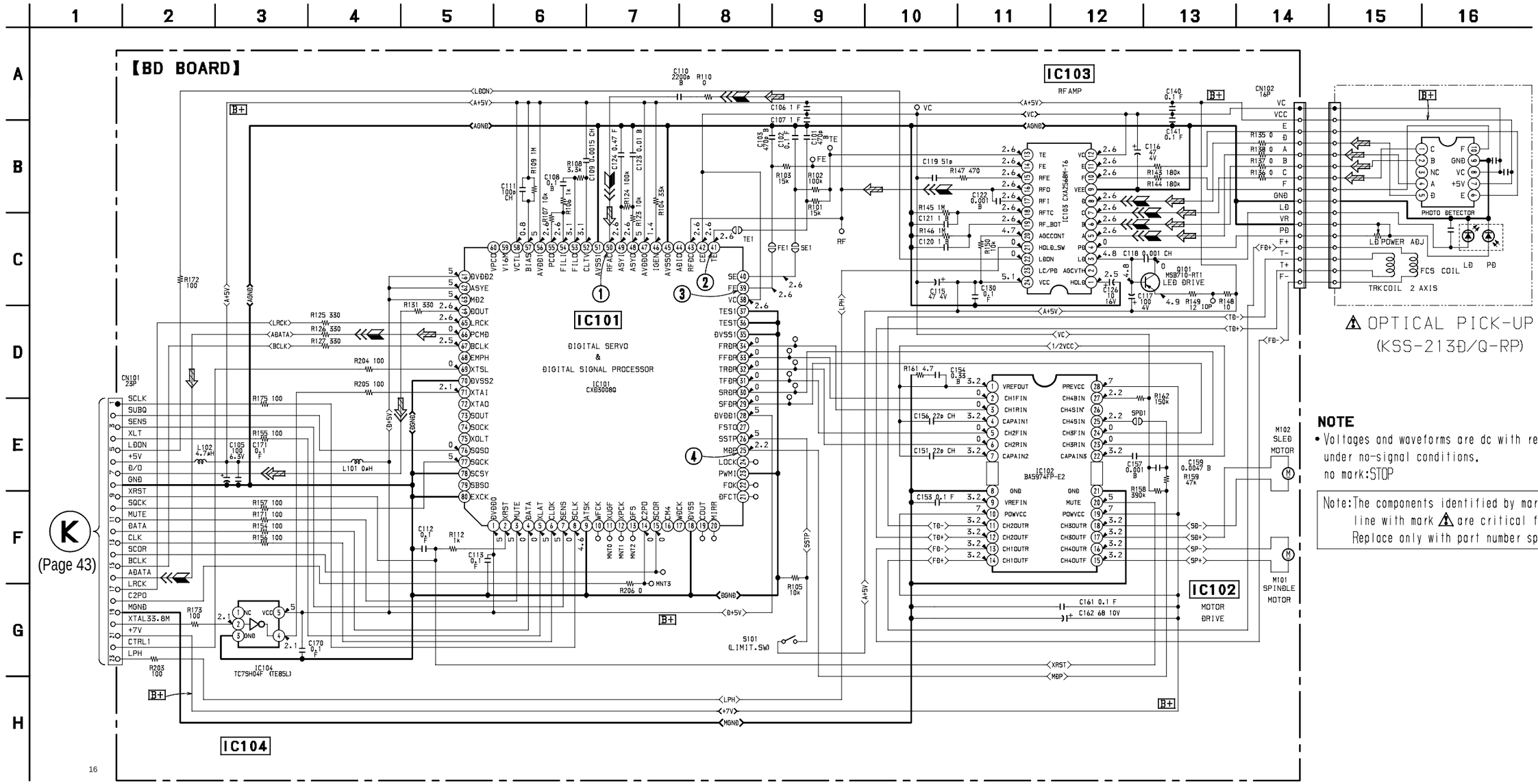
• Refer to page 18 for Circuit Boards Location.





7-9. SCHEMATIC DIAGRAM CD SECTION

• Refer to page 24 for Waveforms. • Refer to pages 46, 47 for IC Block Diagrams.



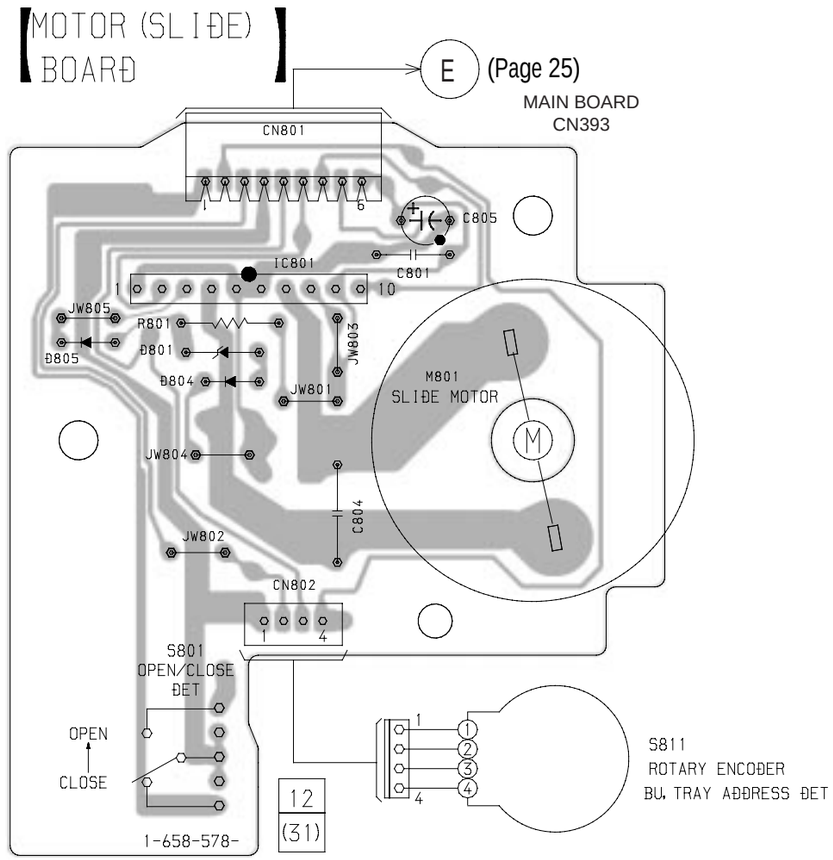
NOTE

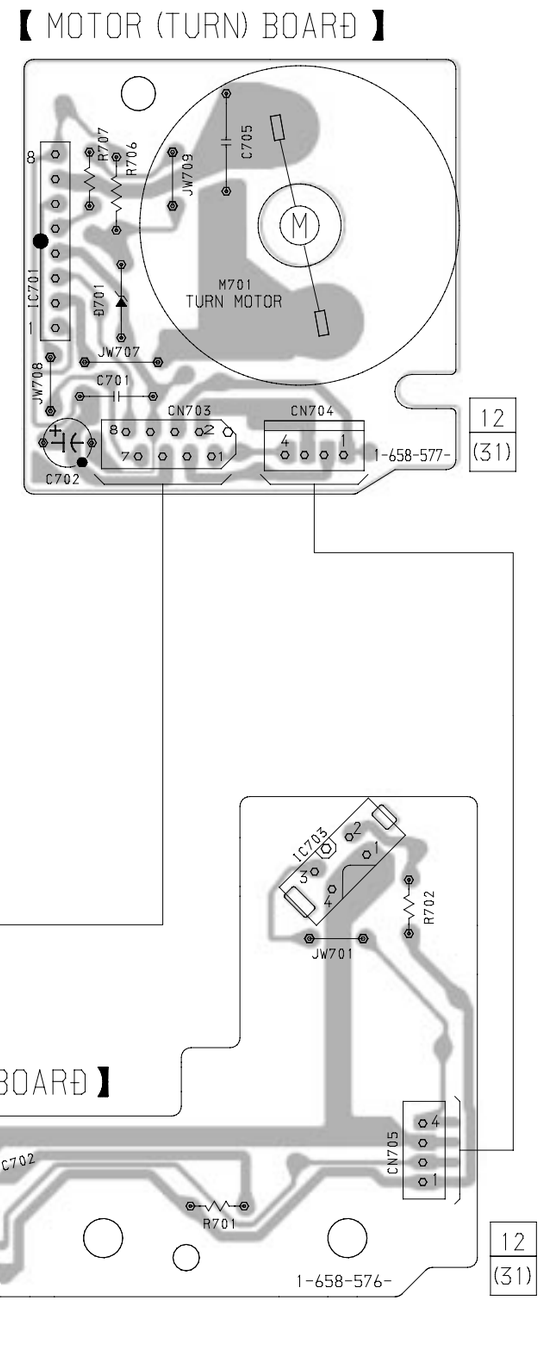
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:STOP

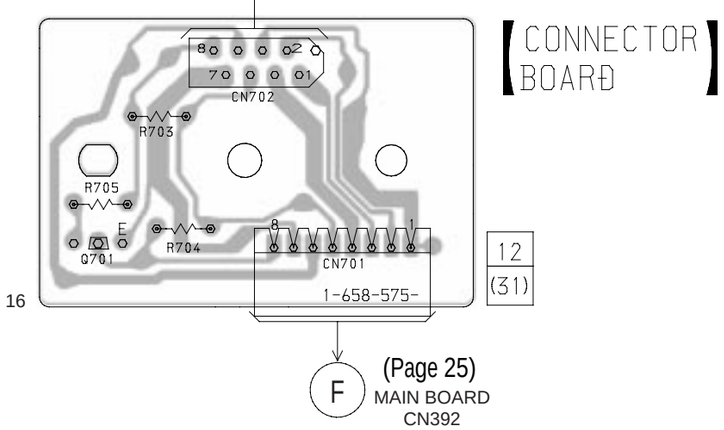
Note:The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

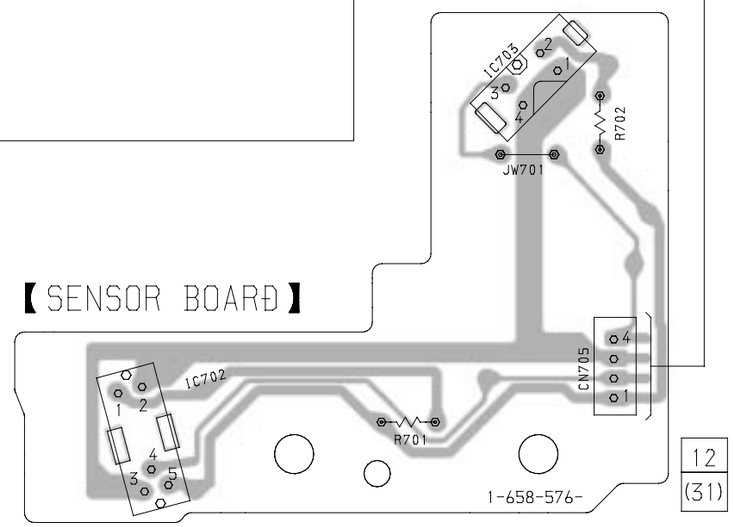
7-10. PRINTED WIRING BOARD CD MOTOR SECTION

• Refer to page 18 for Circuit Boards Location.





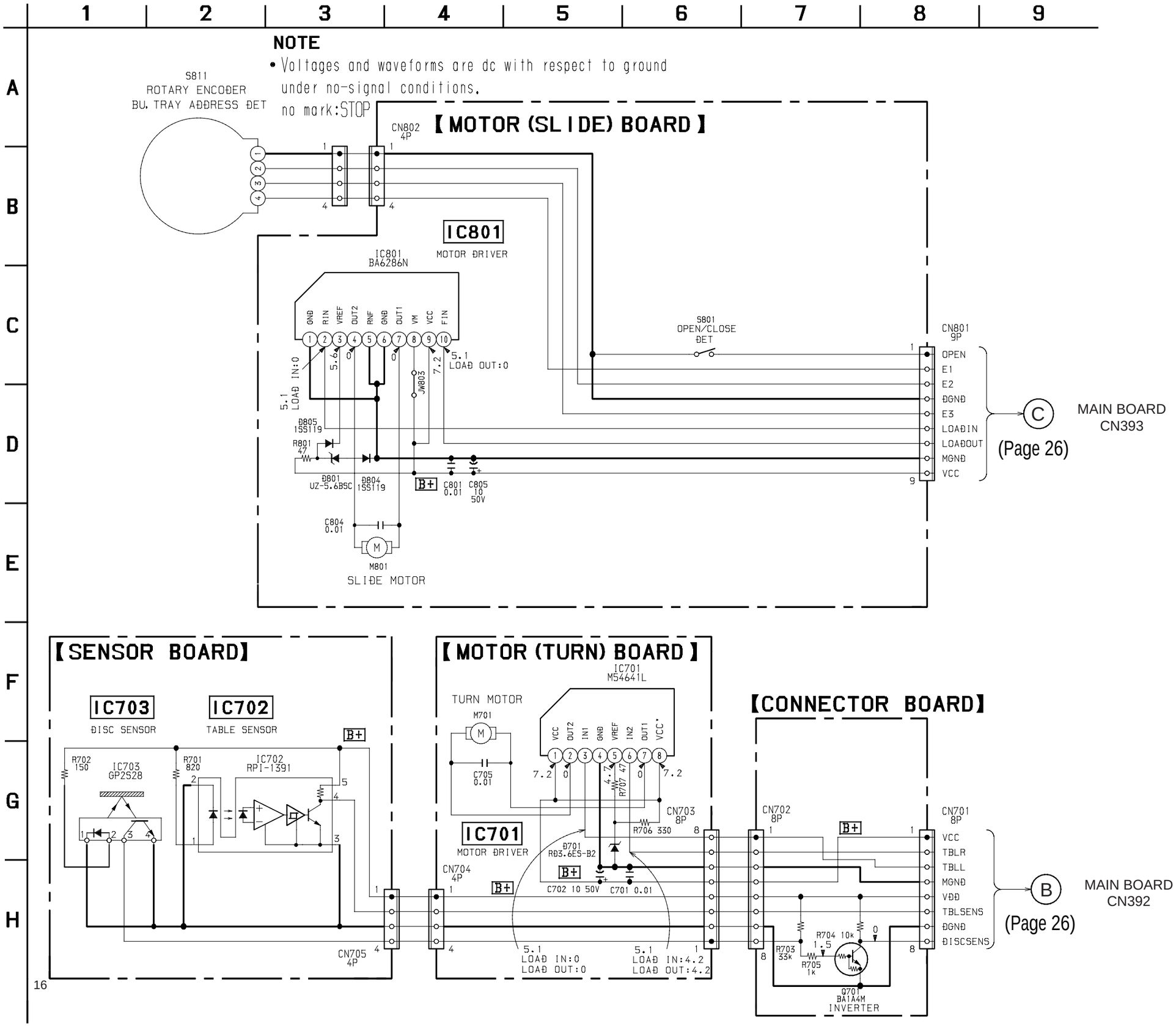




16

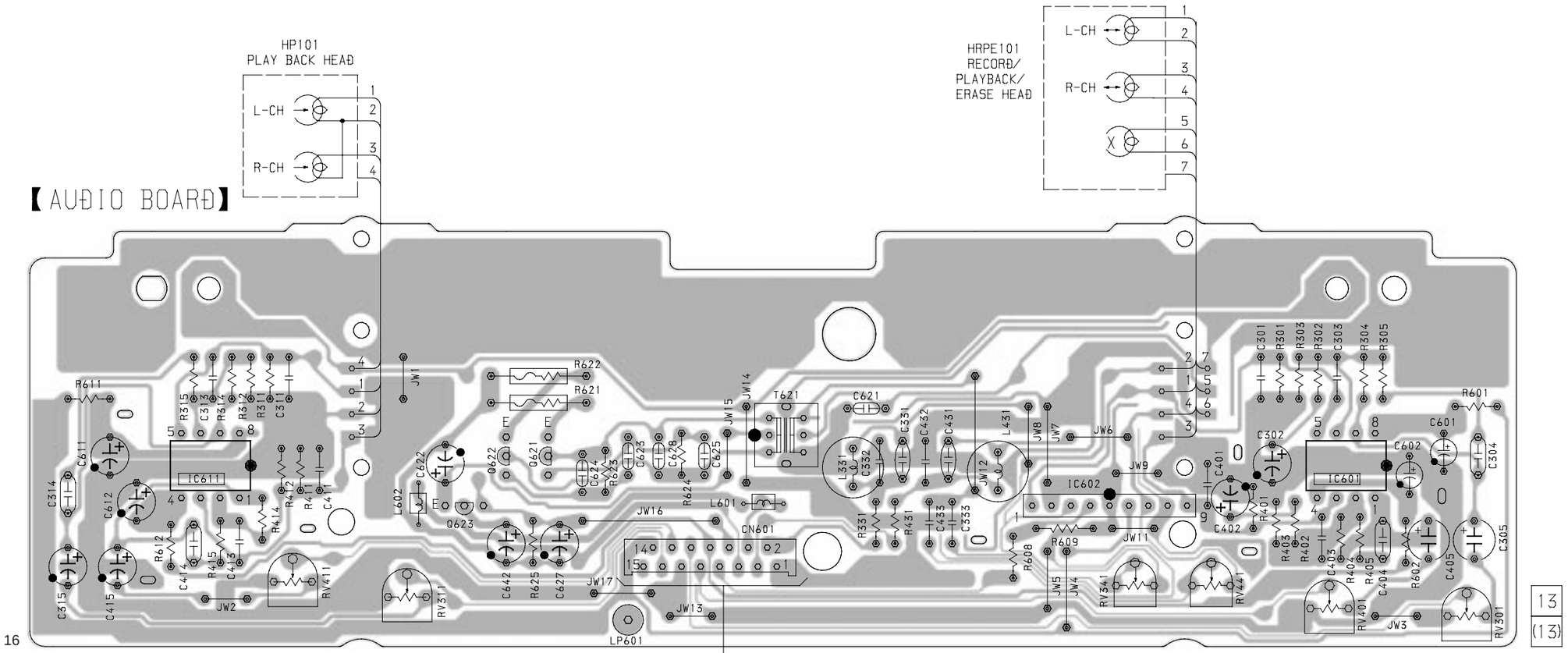
7-11. SCHEMATIC DIAGRAM CD MOTOR SECTION

• Refer to page 46 for IC Block Diagrams.



7-12. PRINTED WIRING BOARD TAPE DECK SECTION

• Refer to page 18 for Circuit Boards Location.

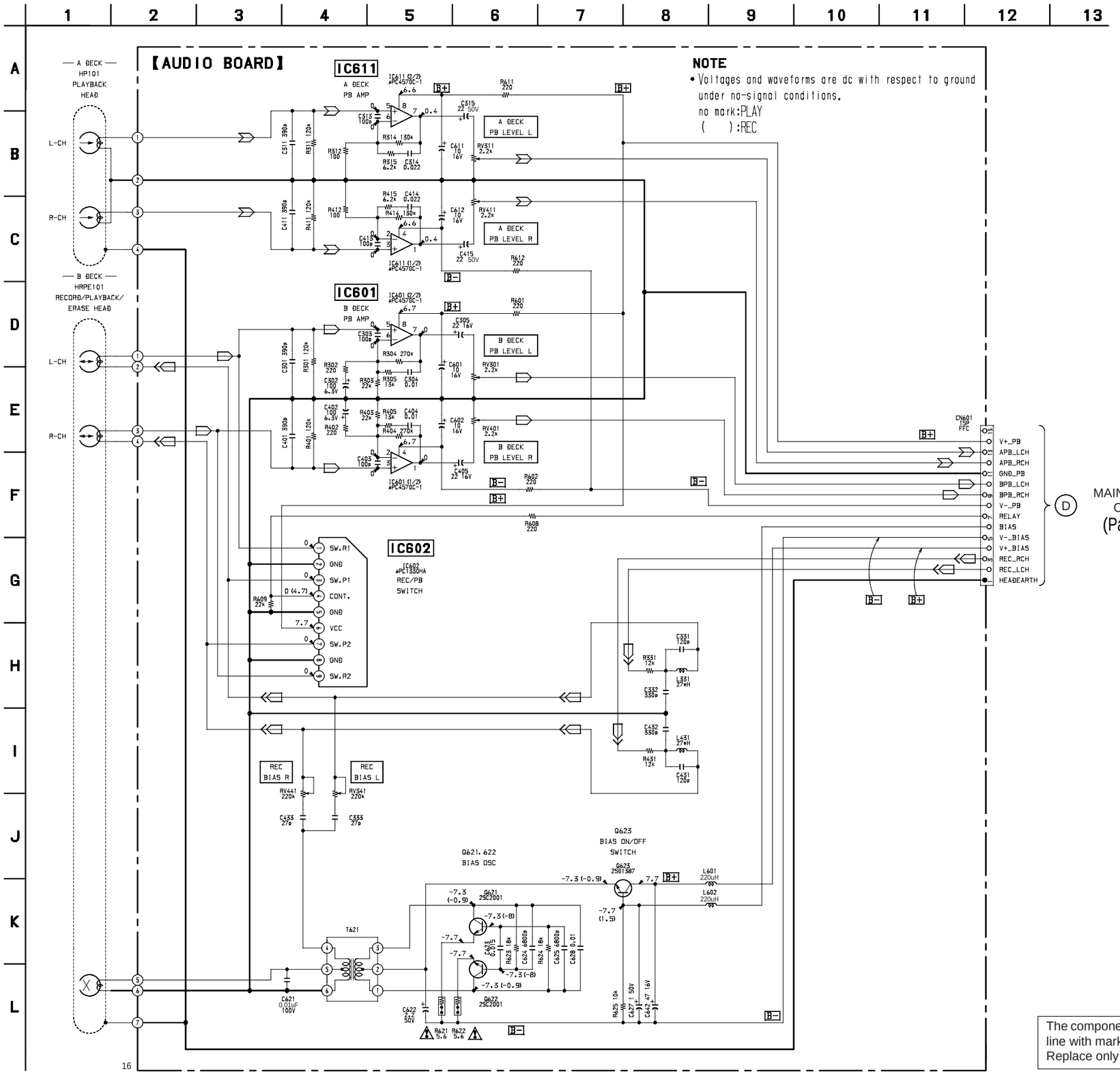


(Page 25)

MAIN BOARD
CN303

7-13. SCHEMATIC DIAGRAM TAPE DECK SECTION

• Refer to page 47 for IC Block Diagrams.



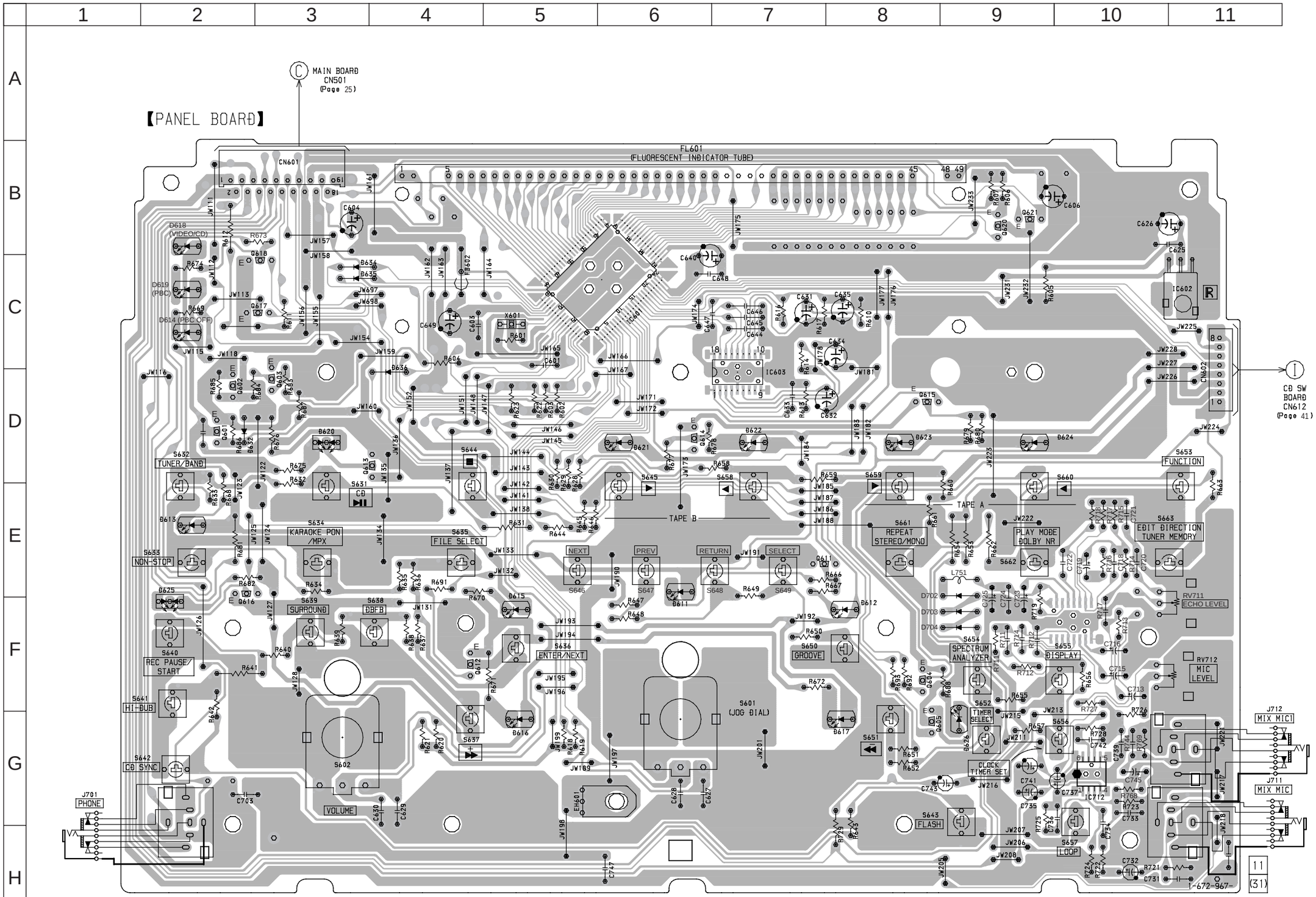
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-14. PRINTED WIRING BOARD PANEL SECTION

• Refer to page 18 for Circuit Boards Location.

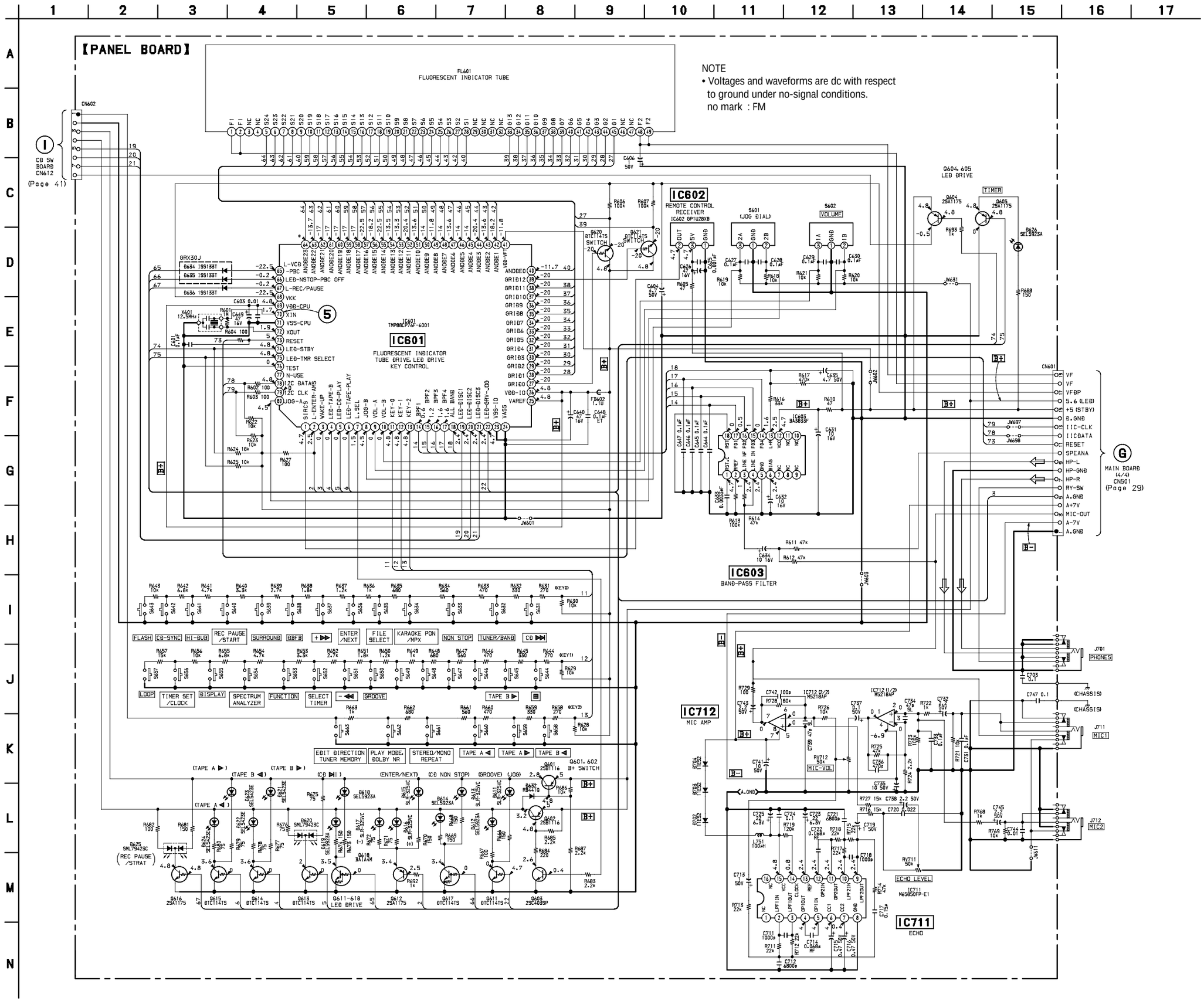
• Semiconductor Location

Ref. No.	Location
D611	E-6
D612	F-8
D613	E-2
D615	F-5
D616	G-5
D617	G-8
D620	D-3
D621	D-6
D622	D-7
D623	D-8
D624	D-9
D625	F-2
D632	D-2
D634	C-3
D635	C-3
D636	C-4
IC601	C-6
IC602	C-11
IC603	D-7
IC712	G-10
Q601	D-2
Q602	D-2
Q603	D-3
Q604	F-8
Q605	G-8
Q611	E-7
Q612	F-4
Q613	D-3
Q614	D-6
Q615	D-8
Q616	F-2
Q617	C-2
Q620	B-9
Q621	B-9



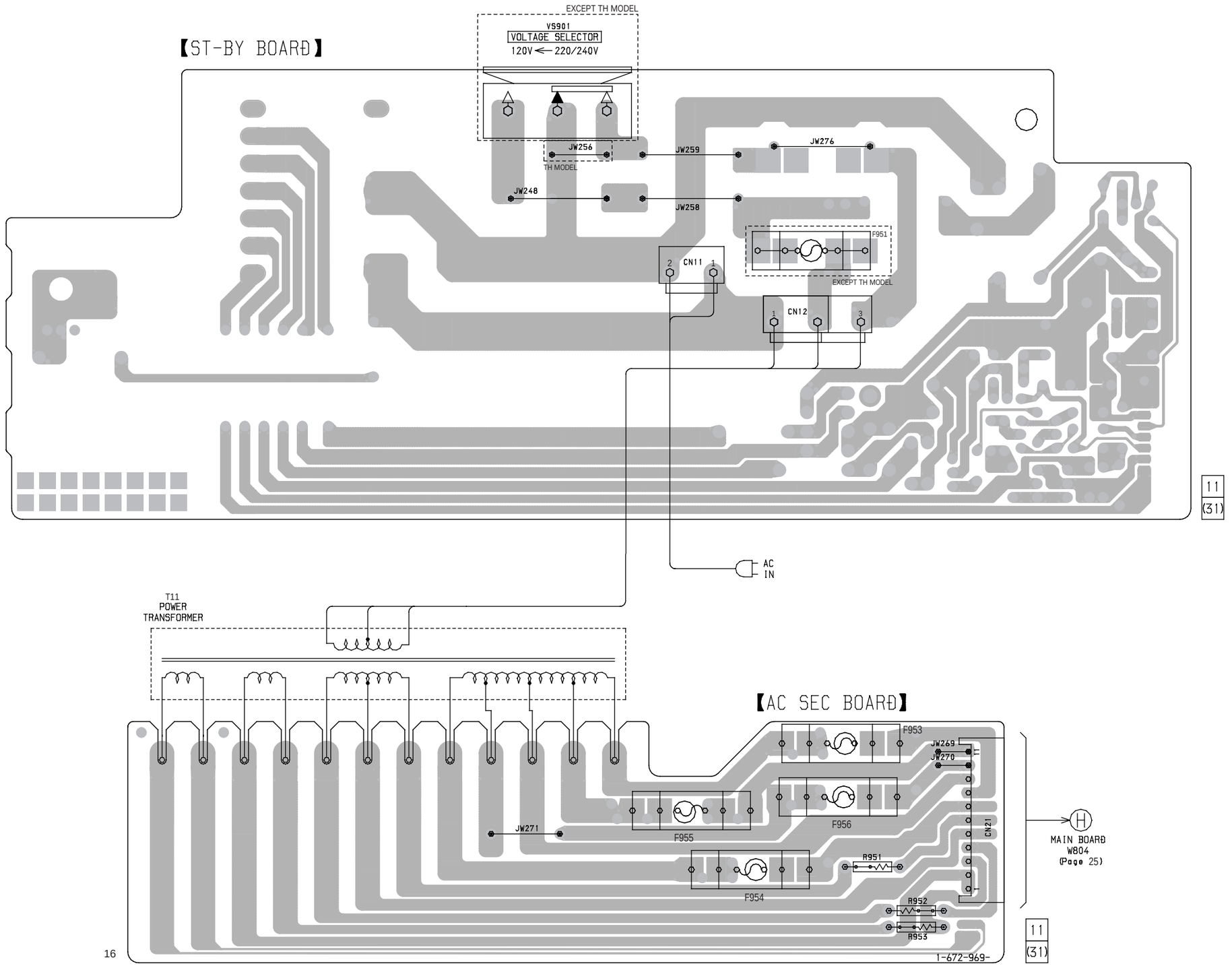
7-15. SCHEMATIC DIAGRAM PANEL SECTION

• Refer to page 24 for Waveform. • Refer to page 51 for IC Pin Function. • Refer to page 46 for IC Block Diagrams.

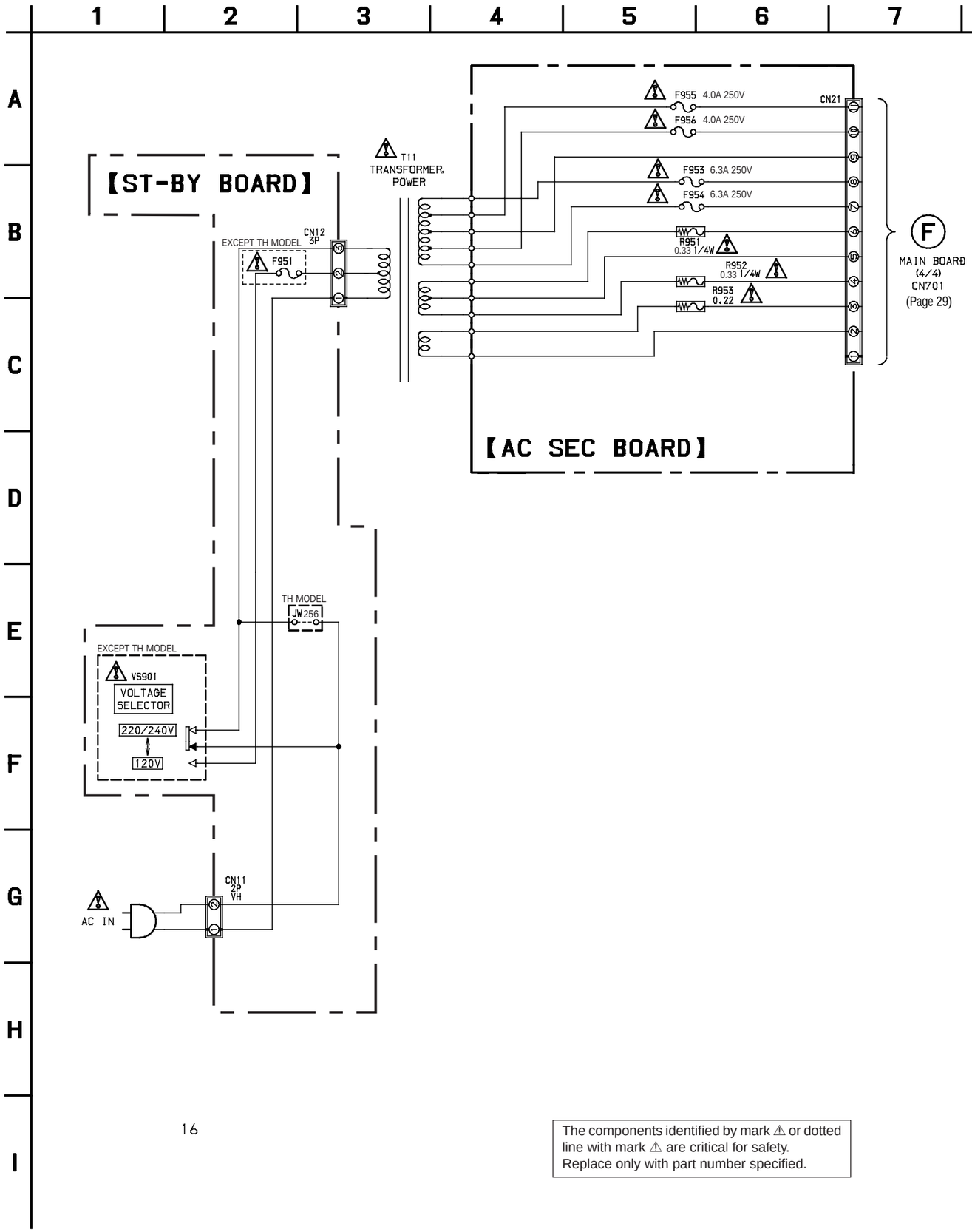


7-16. PRINTED WIRING BOARD AC SEC STANBY SECTION

• Refer to page 18 for Circuit Boards Location.



7-17. SCHEMATIC DIAGRAM AC SEC STANDBY SECTION

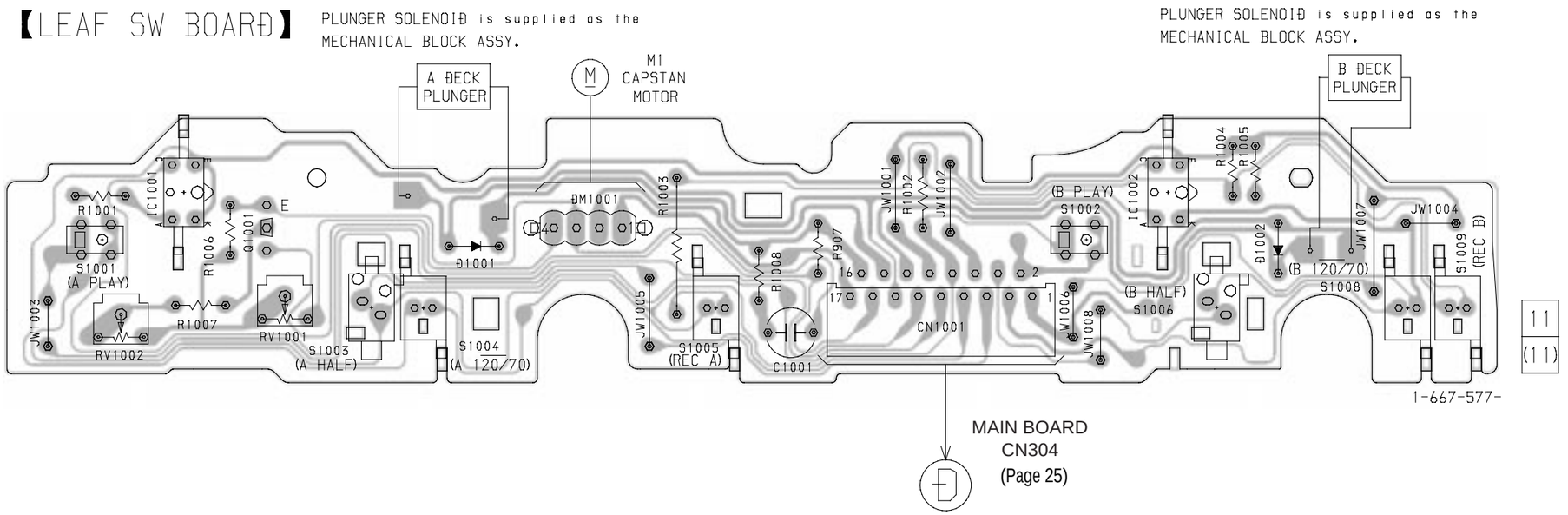


16

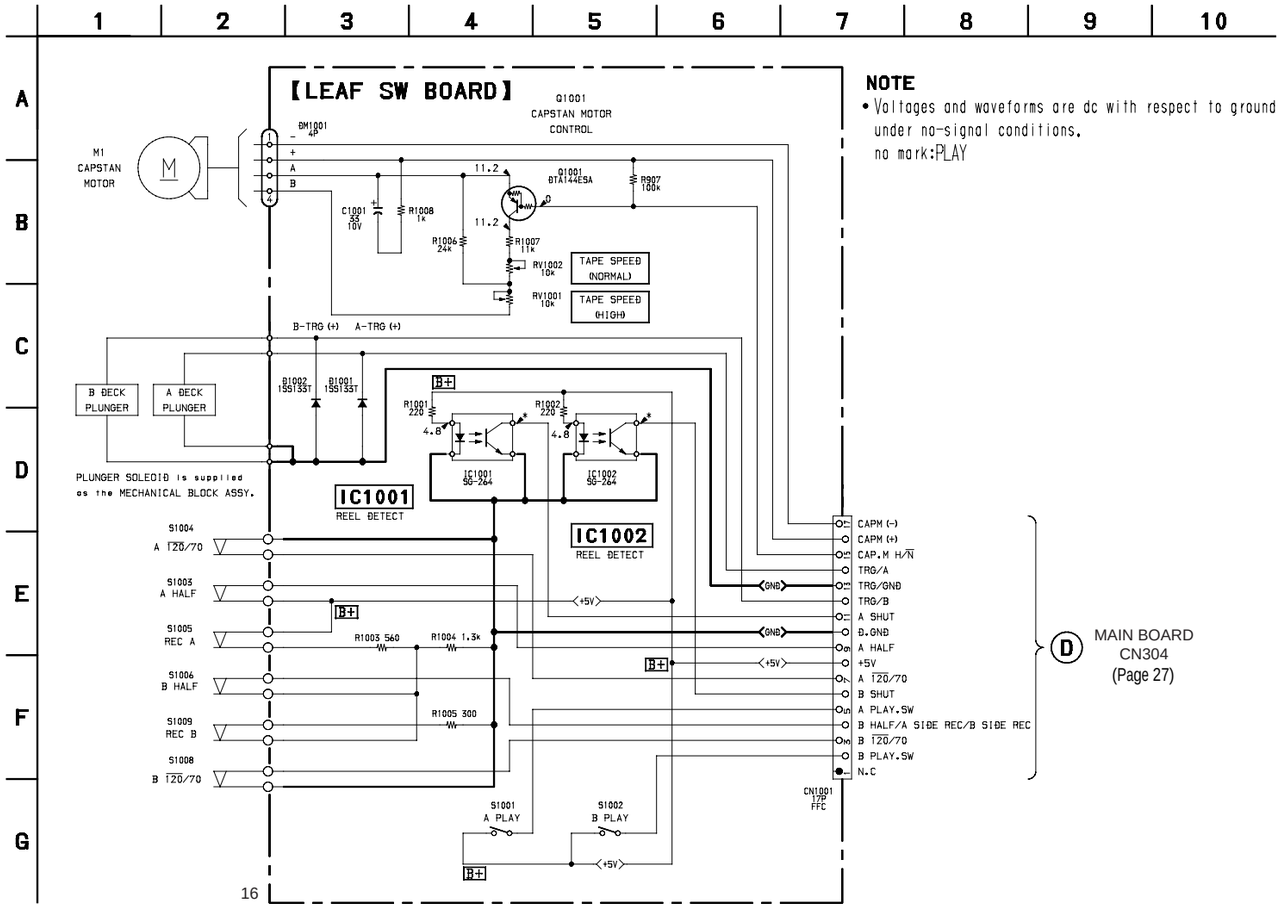
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-18. PRINTED WIRING BOARD LEAF SW SECTION

• Refer to page 18 for Circuit Boards Location.



7-19. SCHEMATIC DIAGRAM LEAF SW SECTION

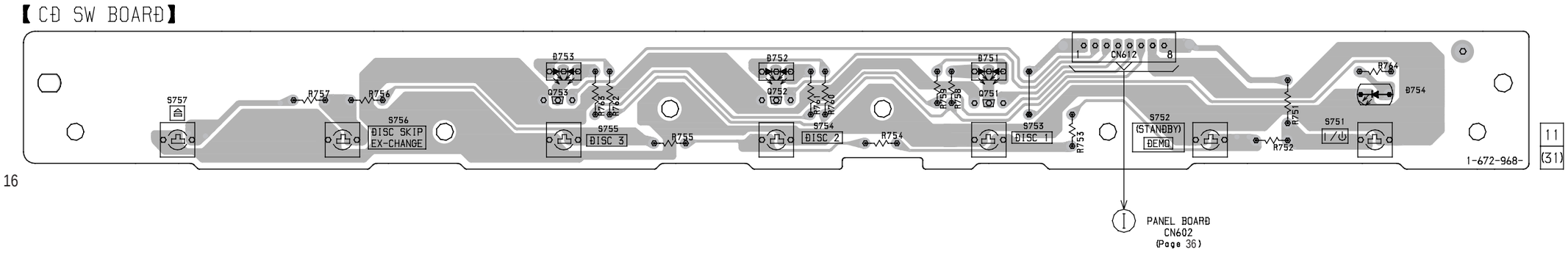


NOTE

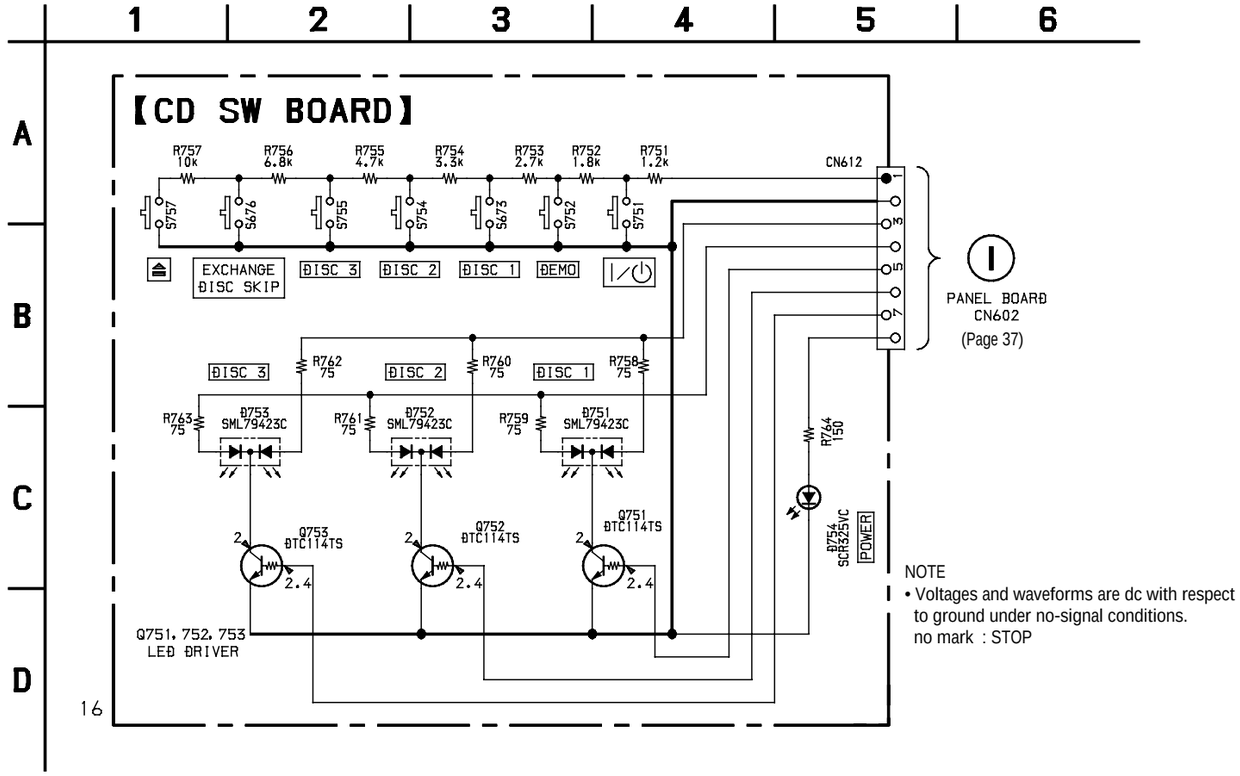
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:PLAY

7-20. PRINTED WIRING BOARD CD SW SECTION

• Refer to page 18 for Circuit Boards Location.



7-21. SCHEMATIC DIAGRAM CD SW SECTION



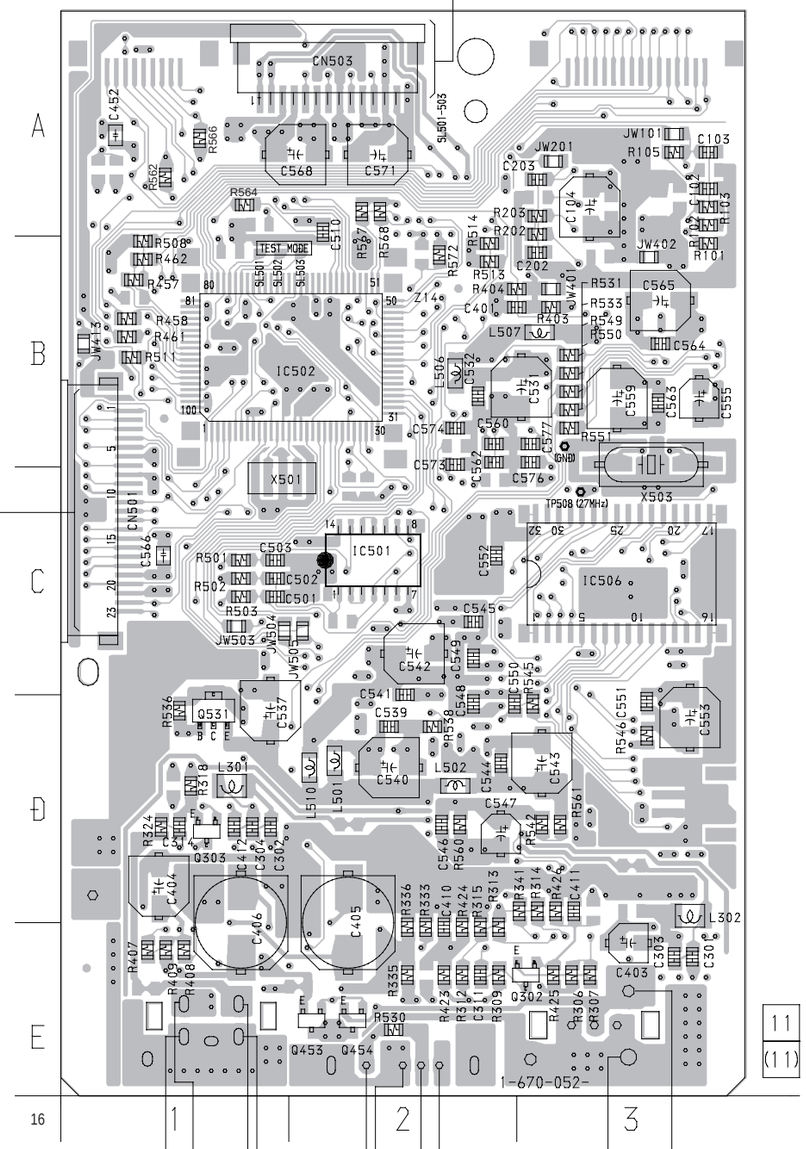
NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : STOP

7-22. PRINTED WIRING BOARD VIDEO SECTION

• Refer to page 18 for Circuit Boards Location.

【VIÐEO BOARÐ】(SIÐE A)

【VIÐEO BOARÐ】(SIÐE B)



• **Semiconductor Location**

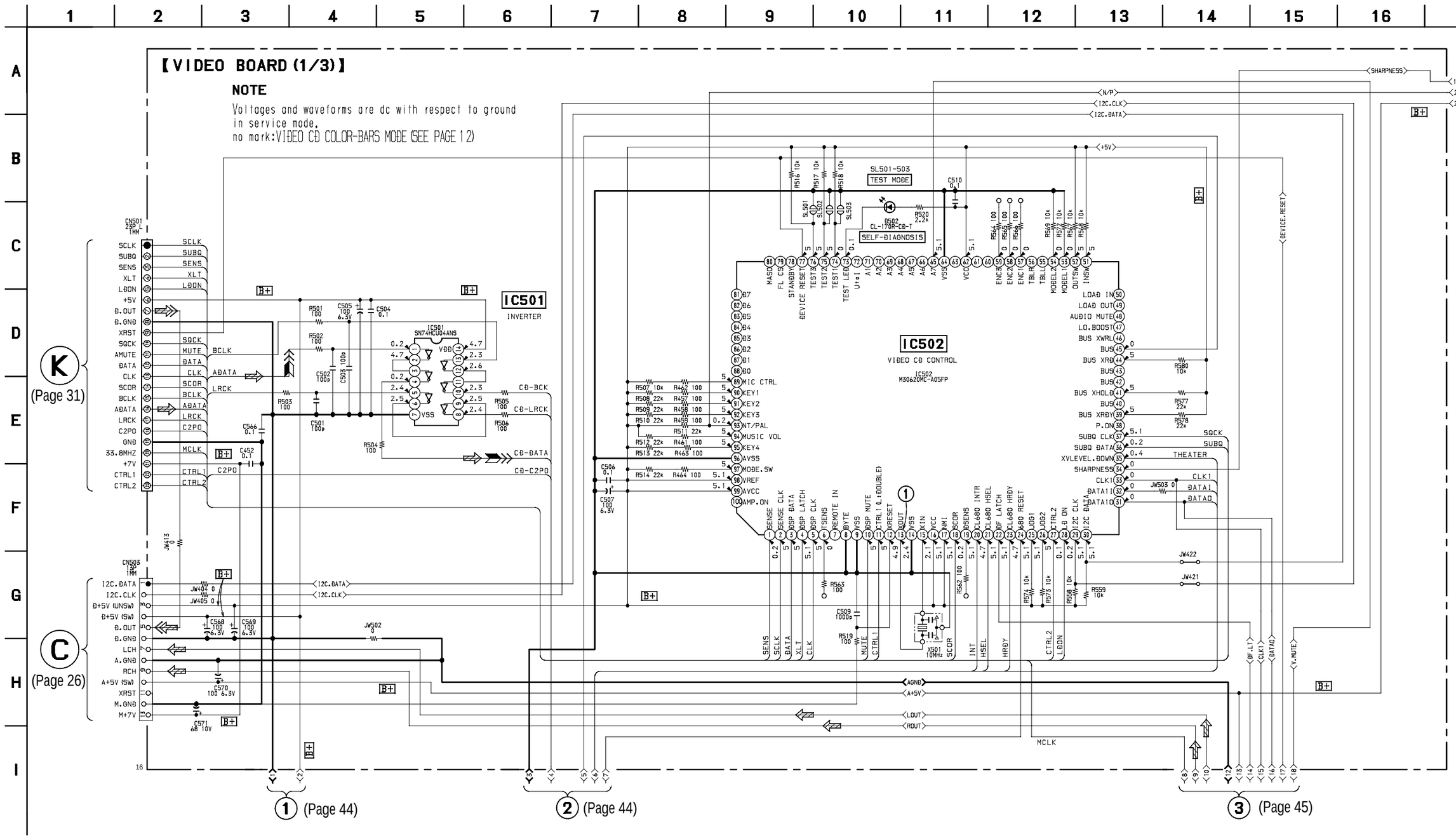
Ref. No.	Location
D301	E-1
D501	D-3
D502	A-3
IC101	A-1
IC401	E-3
IC504	A-1
IC505	C-2
IC507	C-1
IC509	B-1
Q301	E-1
Q304	D-3
Q306	E-1
Q307	E-2
Q308	E-2
Q310	E-2
Q502	D-3

• **Semiconductor Location**

Ref. No.	Location
IC501	C-2
IC502	B-1
IC506	C-3
Q302	E-3
Q303	D-1
Q453	E-2
Q454	E-2
Q531	D-1

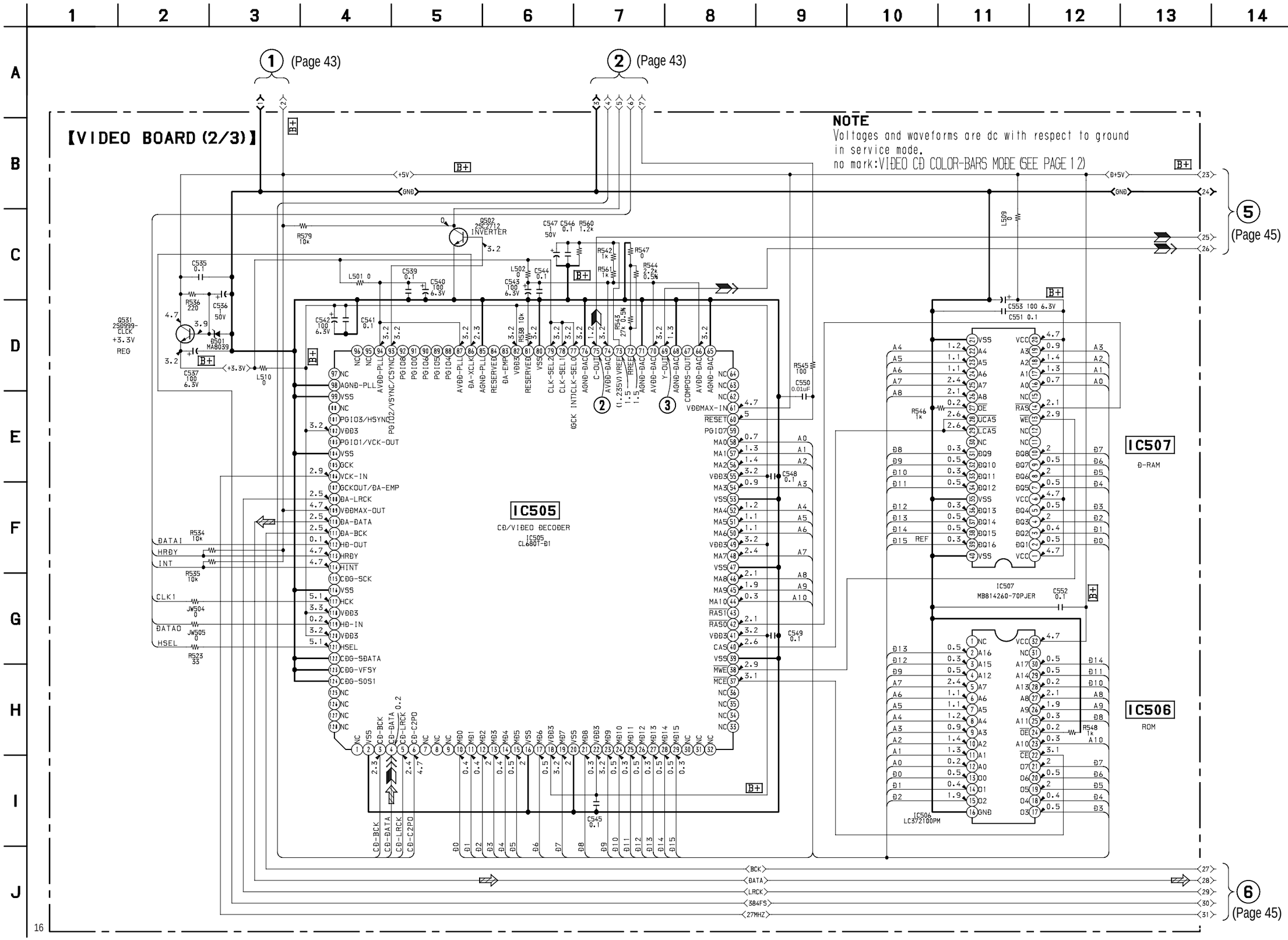
7-23. SCHEMATIC DIAGRAM VIDEO SECTION (1/3)

• Refer to page 54 for IC Pin Function.



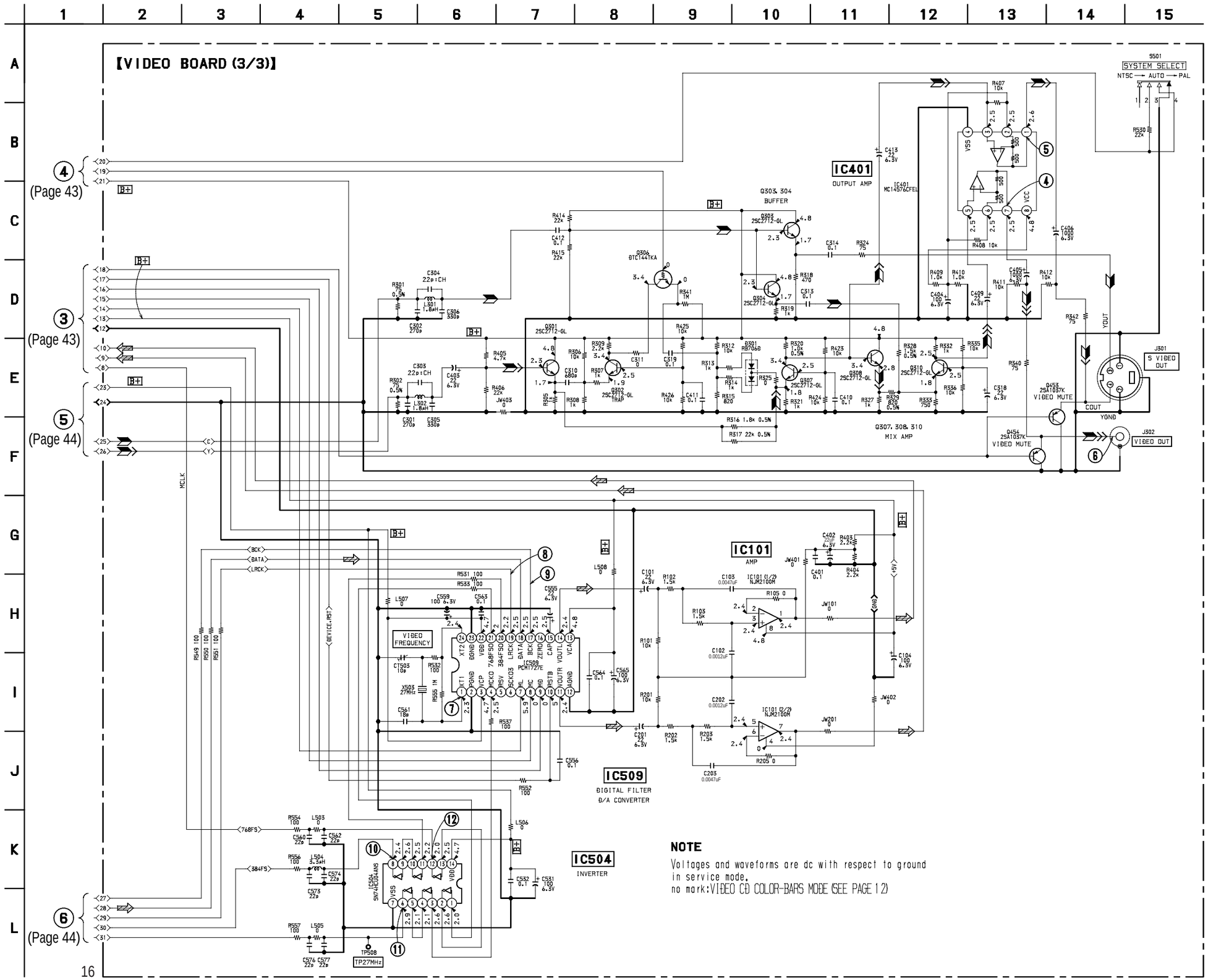
7-24. SCHEMATIC DIAGRAM VIDEO SECTION (2/3)

• Refer to page 56 for IC Pin Function.



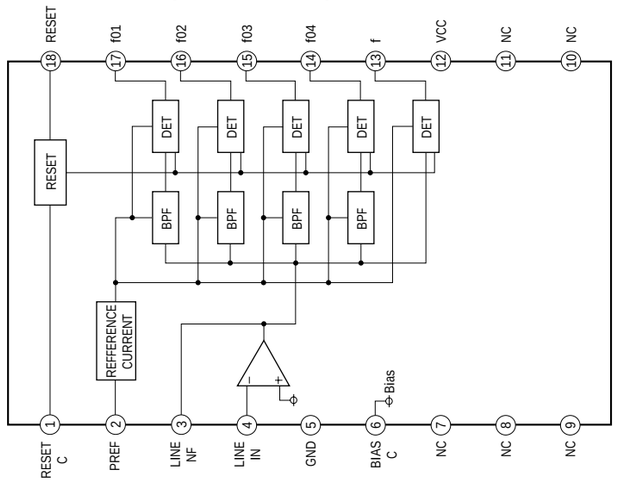
7-25. SCHEMATIC DIAGRAM VIDEO SECTION (3/3)

• Refer to page 48 for IC Block Diagrams.

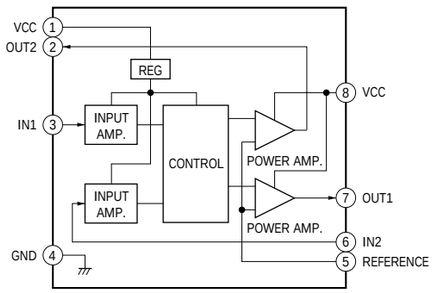


7-26. IC BLOCK DIAGRAMS

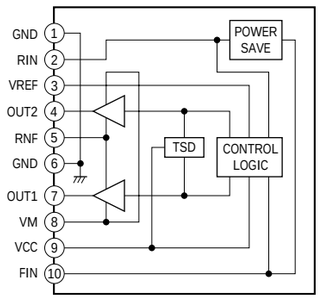
IC603 BA3833FP (PANEL BOARD)



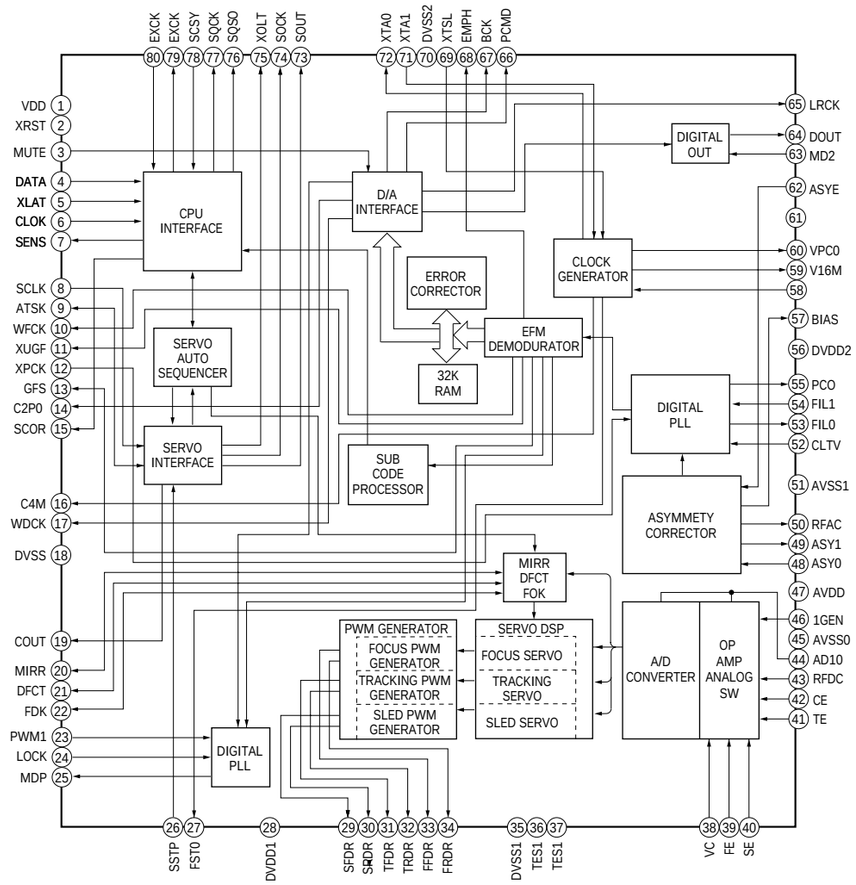
IC701 M54641L (MOTOR (TURN) BOARD)



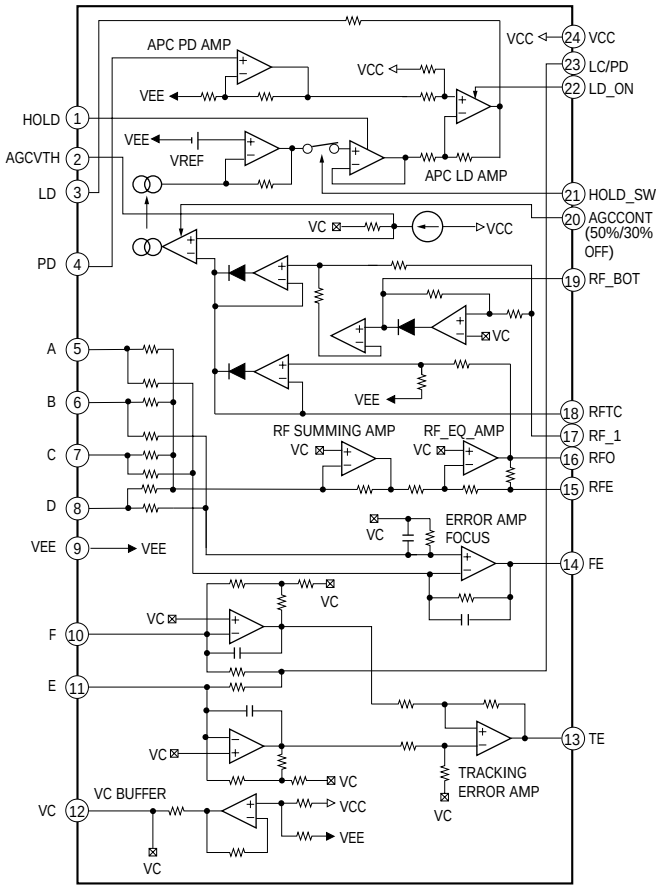
IC801 BA6286N (MOTOR (SLIDE) BOARD)



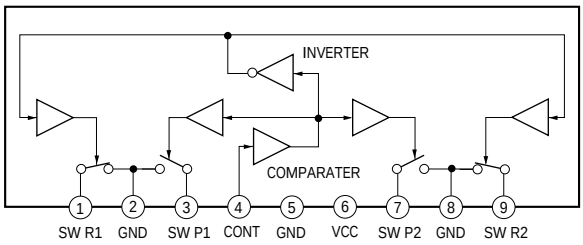
IC101 CXD3008Q (BD BOARD)



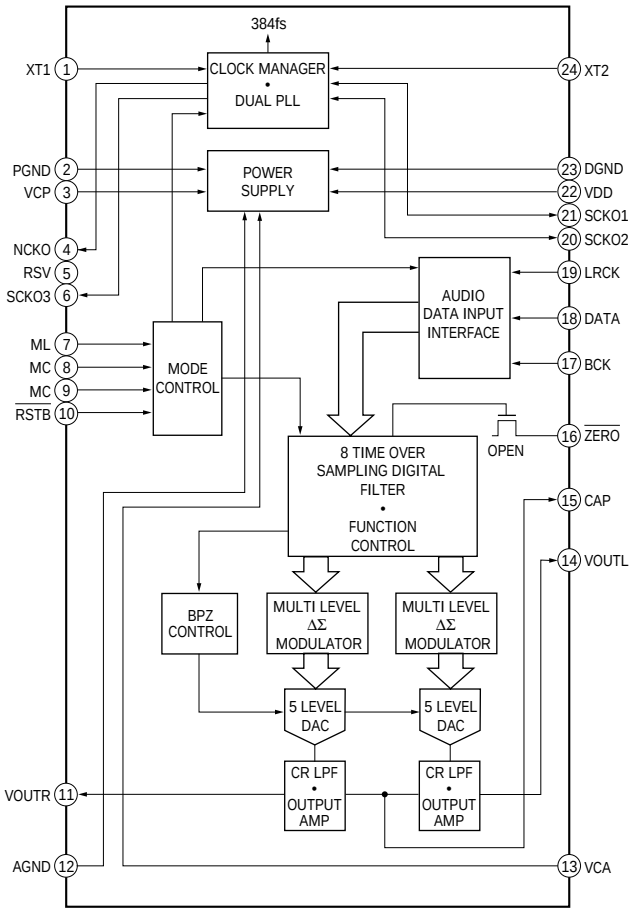
IC103 CXA2568M-T6 (BD BOARD)



IC602 µPC1330HA (AUDIO BOARD)



IC509 PCM1727E-2T2 (VIDEO(3/3) BOARD)



7-27. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD (4/4) SYSTEM CONTROL IC501 M30622MA-A09FP

Pin No.	Pin Name	I/O	Description
1	STK-MUTE	O	STK ON(H)/OFF(L)
2	POWER	O	POWER ON(H)/OFF(L)
3	F-RELAY	O	FRONT-RELAY ON(H)/OFF(L)
4	R-RELAY	O	REAR-RELAY ON(H)/OFF(L)
5	CD-RELAY	O	CD-POWER ON(H)/OFF(L)
6	LINE-MUTE	O	TA LINE-MUTE ON(L)/OFF(H)
7	DBFB-H/L	O	DBFB-HIGH(L)/LOW(H)/OFF(H)
8	GND	—	Ground
9	GND	—	Ground
10	Xcin	I	SUB CLOCK IN
11	Xcout	O	SUB CLOCK OUT
12	RESET	I	SYSTEM RESET IN
13	Xout	O	MAIN SYSTEM CLOCK OUT
14	Vss	—	Vss
15	Xin	I	MAIN SYSTEM CLOCK IN(16MHz)
16	Vcc	O	POWER SUPPLY(+5V)
17	NIMI	I	PULL UP(EVER+5)CAN'T USE
18	WAKE_UP	I	WAKE UP(L)
19	SCOR	I	CD Q-DATA REQUEST
20	RDS-INT	I	RDS INT
21	RDS-DATA	I	RDS DATA
22	AC-CUT	I	AC CUT ON(L)/OFF(H) CHECK
23	PL-CLK	O	PRO-LOGIC CLOCK
24	PL-DATA	O	PRO-LOGIC DATA
25	PL-LAT	O	PRO-LOGIC LATCH
26	TIMER LED	O	TIMER LED ON(H)/OFF(L)(forFH)
27	PROTECTOR IN	I	SPEAKER PROTECT ON(L)/OFF(H)
28	V_MUTE	O	VIDEO MUTE ON(H)/OFF(L)(for LBT)
29	IIC_CLK	O	IIC SCL
30	IIC_DATA	O	IIC SDA
31	N.C.	—	Not used
32	SQ-DATA-IN	I	CD DATA IN
33	SQ-CLK	O	CD DATA CLK
34	N.C.	—	Not used
35	CD-DATA	O	CD DATA
36	HEAD PHONE	I	HEAD PHONE detection Detected (H)/Not detected (L)
37	CD-CLK	O	CD CLK
38	493-LT	O	62493 LATCH
39	CK-OUT/STBY	O	CLOCK CHECK/STBY-LED(H)(FH)
40	VC L+R/L–R	O	VIRTUAL CINEMA L+R/L-R(FH LCD)
41	VC BYPASS	O	VIRTUAL CINEMA BYPASS(FH LCD)
42	FL SW	O	FL FILAMENT ON(L)/OFF(H)(for ECO)
43	STBY_RELAY	O	MAIN POWER ON(H)/OFF(L)(for ECO)
44	BASS_FREQ	O	FREQ High(H)/LOW(L)(for SYNC BASS)
45	FUNC_SEL1	O	FUNC_SEL1(LBT)
46	FUNC_SEL0	O	FUNC_SEL0(LBT)/OPT SEL(AMD, MK33)
47	493-DATA	O	62493 DATA
48	493-CLK	O	62493 CLOCK
49	ST-MUTE	O	TUNER MUTE
50	STEREO	I	STEREO IN(L)/OFF(H)

Pin No.	Pin Name	I/O	Description
51	TUNED	I	TUNED IN(L)/OFF(H)
52	ST-CE	O	TUNED CHIP ENB
53	ST-DOUT	O	TUNER DATA OUT
54	ST-DIN	I	TUNER DATA IN
55	ST-CLK	O	TUNER CLOCK
56	SENS	I	From CXP2587 SENS
57	HOLD	O	MODE
58	XLT	O	CD LATCH
59	XRST	O	CD RESET
60	DISC-SENS	I	DISC SENSOR
61	T-SENS	I	TABLE SENSOR
62	Vcc	O	POWER SUPPLY(+5V)
63	TBL-L	O	TABLE-L
64	Vss	—	Ground terminal
65	TBL-R	O	TABLE-R
66	LOAD-OUT	O	LOAD OUT
67	LOAD-IN	O	LOAD IN
68	ENC3/UP_SW	I	CDM38 ENCODER IN/CDM37 UP SW
69	ENC2/DISC LED	O	DM38 ENCODER IN/CDM37 DISC LE
70	ENC1/IN SW	I	CDM38 ENCODER IN/CDM13 IN SW
71	OUT-OPEN	I	CDM38 OUT OPEN SW
72	B-TRG	O	TCM-B TRIGGER OUT ON(H)/OFF(L)
73	A-TRG	O	TCM-A TRIGGER OUT ON(H)/OFF(L)
74	CAPM-CNT2	O	Capstan L (reverse rotation)/H (normal rotation)/L (STOP)
75	CAPM-CNT1	O	Capstan H (reverse rotation)/L (normal rotation)/L (STOP)
76	CAP-M-H/L	O	CAP-MOTOR High(H)/Low(L)
77	AMS-IN	I	AMS SIGNAL IN (L)/OFF (H)
78	TC-MUTE	O	TC LINE MUTE ON (H)/OFF (L)
79	REC/PB/PASS	O	REC (L)/PB (Z)/PASS (H)
80	DOLBY NR	O	DOLBY NR ON (H)/OFF (L)
81	REC-MUTE	O	REC MUTE ON (L)/OFF (H)
82	BIAS	O	BIAS ON(H)/OFF(L)
83	EQ-H/N	O	EQ HI(H)/NORM(L)
84	PB-A/B	O	TC A (L)/B (H) SELECT
85	ALC	O	ALC ON (L)/OFF (H)
86	B-PLAY-SW	I	TCM-B PLAY SW IN
87	A-PLAY-SW	I	TCM-A PLAY SW IN
88	A-HALF	I	A deck HALF
89	B-HALF	I	B deck HALF
90	B-SHUT	I	TCM-B REEL PULSE
91	A-SHUT	I	TCM-A REEL PULSE
92	SOFT-TEST	O	SOFT CHECK OUT
93	AD PHONE MU	O	HEAD PHONE MUTE ON (L)/OFF (H)
94	KEY/CD ADJ	I	KEY (for jig)/CD adjustment
95	MODEL-IN	I	MODEL IN
96	Avss	—	Analog Ground
97	SPEC-IN	I	SPEC IN
98	Vref	O	Analog Reference Voltage
99	Avcc	O	Analog Power Supply
100	TC-RELAY	O	TC RELAY ON (H)/PFF (L)

• PANEL BOARD IC601 TMP88CP76F-6001 (FLUORESCENT INDICATOR TUBE DRIVE, LED DRIVE, KET CONTROL)

Pin No.	Pin Name	I/O	Description
1	SIRCS	I	Remote control signal input from the remote control receiver (IC602)
2	LED-ENTER-AMS	O	Led For ENTER/AMS
3	WAKE-UP	O	WAKE-UP For Powersave
4	LED-TAPE-B	O	LED For TAPE B FW/RV
5	LED-CD-PLAY	O	LED For CD PLAY/PAUSE
6	LED-TAPE-A	O	LED For TAPE A FW/RV
7	L.SEL	O	Dynamic LED
8	JOG-B	I	Jog dial pulse input from the S601 (JOG)
9	VOL-A	I	Rotary encoder pulse input from the S602 (VOLUME)
10	VOL-B	I	Rotary encoder pulse input from the S602 (VOLUME)
11	KEY-0	I	Key input terminal (A/D input) (S631 to S643)
12	KEY-1	I	Key input terminal (A/D input) (S644 to S657)
13	KEY-2	I	Key input terminal (A/D input) (S658 to S663)
14 to 17	BPF1 to BPF4	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter (IC603)
18	ALL BAND	I/O	Vacs/non-stop
19	LED-DISK-1	O	Led for DISK1
20	LED-DISK-2	O	Led for DISK2
21	LED-DISK-3	O	Led for DISK3
22	LED-GRV-JOG	I	LED for GROOVE/JOG
23	VSS-IO	I/O	Ground terminal
24	VASS	—	Ground terminal
25	VAREF	I	Reference voltage (+5V) input terminal (forA/D conversion)
26	VDD-IO	I/O	Power supply terminal (+5V)
27 to 39	GRID 0 to GRID12	O	Grid drive signal output to the fluorescent indicator tube (FL601)
40	ANODE0	O	Anode drive signal output to the fluorescent indicator tube (FL601)
41	VDD-VFT	—	Power supply terminal (+5V)
42 to 64	ANODE1 to ANODE23	O	Anode drive signal output to the fluorescent indicator tube(FL601)
65	L-VCD-PBC	O	Led for VCD/PBC on
66	LED-NSTOP-PBC-OFF	O	LED for STOP/PBC-OFF
67	L-REC/PAUSE	O	Led for REC/PAUSE
68	VKK	—	Power supply terminal (-30V) (for fluorescent indicator tube drive)
69	VDD-CPU	—	Power supply terminal (+5V)
70	XIN	I	System clock input terminal (12.5MHz)
71	VSS-CPU	—	Ground terminal
72	XOUT	O	System clock output terminal (12.5MHz)
73	RESET	I	System reset signal input from the reset sygnal generator (IC501)
74	LED-STBY	O	Led for Standby
75	LED-TMR SELECT	O	Led for timer
76	TEST	I	Connected to ground
77	N.C.	—	Not connected
78	I2C DATA	I/O	Communication data bus with the system controller (IC501)
79	I2C CLK	I/O	Communication data reading clock sygnal input or transfer clock sygnal output withthe system controller (IC501)
80	JOG-A	I	Jog dial pulse input from the S601 (JOG)

• BD BOARD IC101 DIGITAL SIGNAL PROCESSOR (CXD3008Q)

Pin No.	Pin Name	I/O	Description
1	DVDD0	—	Digital power supply
2	XRST	I	System reset
3	MUTE	I	Muting selection pin
4	DATA	I	Serial data input, supplied from CPU
5	XLAT	I	Latch input, supplied from CPU
6	CLOK	I	Serial data transfer clock input, supplied from CPU
7	SENS	O	SENS output
8	SCLK	I	SENS serial data read-out clock
9	ATSK	I/O	Input pin for anti-shock (Ground)
10	WFCK	O	WFCK (Write Frame Clock) output (Not used)
11	XUGF	O	XUGF output (Not used)
12	XPCK	O	XPCK output (Not used)
13	GFS	O	GFS output (Not used)
14	C2P0	O	C2PO output
15	SCOR	O	Sub-code sync output
16	CM4	O	4.2336MHz output (Not used)
17	WDCK	O	48-bit slot D/A interface word clock (Not used)
18	DVSS	—	Digital ground
19	COUT	O	Numbers of track counted signal output (Not used)
20	MIRR	O	Mirror signal output (Not used)
21	DFCT	O	Defect signal output (Not used)
22	FOK	O	Focus OK output (Not used)
23	PWM1	I	(Not used)
24	LOCK	I/O	GFS in sampled by 460Hz (Not used)
25	MDP	O	Output to control spindle motor servo
26	SSTP	I	Input signal to detect disc inner most trak
27	FST0	O	2/3 divider output (Not used)
28	DVDD1	—	Digital power supply
29	SFDR	O	Sled drive output
30	SRDR	O	
31	TFDR	O	Tracking drive output
32	TRDR	O	
33	FFDR	O	Focus drive output
34	FRDR	O	
35	DVSS1	—	Digital ground
36	TEST	I	TEST pin connected normally ground
37	TES1	I	
38	VC	I	Center voltage input
39	FE	I	FOCUS error signal input
40	SE	I	Sled error signal input

Pin No.	Pin Name	I/O	Function
41	TE	I	Tracking error signal input
42	CE	I	Center servo analog input
43	RFDC	I	RF signal input
44	ADI0	O	Test pin (Not used)
45	AVSS0	—	Analog ground
46	IGEN	I	Power supply pin operational amplifiers
47	AVDD	—	Analog power supply
48	ASYO	O	EFM full swing output
49	ASYI	I	Asymmetry comparate voltage input
50	RFAC	I	EFM signal input
51	AVSS1	—	Analog ground
52	CLTV	I	Control voltage input for master VCO
53	FILO	O	Filter output for master PLL
54	FILI	I	Filter input for master PLL
55	PCO	O	Charge-pump output for master PLL
56	AVDD1	—	Analog power supply
57	BIAS	I	Asymmetry circuit constant current input
58	VCTL	I	Control voltage input for variable pitch PLL
59	V16M	I/O	16.9344MHz output (Not used)
60	VPCO	O	Charge-pump output for variable pitch PLL (Not used)
61	DVDD2	—	Digital power supply
62	ASYE	I	Asymmetry circuit ON/OFF
63	MD2	I	Digital-out ON/OFF control
64	DOUT	O	Digital-out output
65	LRCK	O	48-bit slot D/A interface, LR clock output
66	PCMD	O	48-bit slot D/A interface, Serial deta output
67	BCLK	O	48-bit slot D/A interface, bit clock output
68	EMPH	O	Playback disc output in emphasis mode (Not used)
69	XTSL	I	X'tal selection input pin
70	DVSS2	—	Digital ground
71	XTAI	I	X'tal oscillator circuit input
72	XTAO	O	X'tal oscillator circuit output (Not used)
73	SOUT	O	(Not used)
74	SOCK	O	(Not used)
75	XOCT	O	(Not used)
76	SQSO	O	Sub-Q serial output
77	SQCK	I	Clock input for SQSO read-out
78	SCSY	I	Sub-code input
79	SBSO	O	Sub-P through Sub-W serial output (Not used)
80	EXCR	I	Clock input for SBSO read-out

• VIDEO(1/3)BOARD IC502 MPEG DECODER, MECHANISM CONTROL (M30620MC-A05FP)

Pin No.	Pin Name	I/O	Function
1	SENSE	I	Internal state (SENSE) monitor input (IC101)
2	SENSE CLK	O	Serial data reading clock output (IC101)
3	DSP DATA	O	Serial data output (IC101)
4	DSP LATCH	O	Latch output (IC101)
5	DSP CLK	O	Serial data clock output (IC101)
6	TSENS	I	Not used
7	REMOTE IN	I	Not used
8	BYTE	I	External bus width change input (Connected to ground)
9	VSS	–	Ground
10	DSP MUTE	O	Mute output (IC101) “H” : mute
11	CTRL1(L:DOUBLE)	O	Double change output (IC101) “L” : double
12	XRESET	I	System reset input “L” : reset
13	XOUT	O	Main clock output (10MHz)
14	VSS	–	Ground
15	XIN	I	Main clock input (10MHz)
16	VCC	–	+5V power supply
17	NMI	I	Requests mask disable interruption input (Connected to +5V)
18	SCOR	I	Subcode sync input (IC101)
19	D SENS	I	Not used
20	CL680 INT	I	Video CD interruption input (IC505)
21	CL680 HSEL	O	Video CD select data of the host MPU (IC505)
22	DF LATCH	O	Digital filter latch output (IC509)
23	CL680 HRDY	I	Ready signal input for communication to the host MPU (IC505)
24	680 RESET	O	Video CD reset output (IC505) “L” : reset
25	JOG1	I	Not used
26	JOG2	I	Not used
27	CTRL2	O	Double control output (IC101) “H” : double
28	LD ON	O	Laser diode ON/OFF output
29	IIC1	I/O	IIC convertion microcomputer receive data (Former type), IIC clock input from master control (New type)
30	IIC0	I/O	IIC convertion microcomputer transmittion data (Former type), IIC data input from master control (New type)
31	DATA1O	O	Serial 1 data output (IC505, 509)
32	DATA1I	I	Serial 1 data input (IC505, 509)
33	CLK1	O	Serial 1 clock output
34	SHARPNESS	O	Sharpness output L : normal, H : sharpness
35	XVLEVEL. DOWN	O	Fix the video signal output level output
36	SUBQ DATA	I	Serial 2 data input for subcode sync reading
37	SUBQ CLK	I	Serial 2 clock input for subcode sync reading
38	P. ON	I	Not used
39	BUS XRDY	I	Not used
40	BUS	I	Not used
41	BUS XHOLD	I	Not used
42, 43	BUS	I	Not used
44	BUS XRD	I	Model selection input “L” : chinese model, “H” : except chinese model
45	BUS	I	V sync signal input

Pin No.	Pin Name	I/O	Function
46	BUS XWRL	I	Not used
47	LO. BOOST	I	Not used
48	AUDIO MUTE	O	Audio mute output “L” : mute
49	LOAD OUT	I	Not used
50	LOAD IN	I	Not used
51	INSW	I	Not used
52	OUTSW	I	Not used
53	MODEL 1	I	L : System input (Fixed at “L”)
54	MODEL 2	I	L : System input (Fixed at “L”)
55	TBLL	I	Not used
56	TBLR	I	Not used
57	ENC 1	I	Not used
58	ENC 2	I	Not used
59	ENC 3	I	Not used
60	—	–	Not used
61	—	–	Not used
62	VCC	–	+5V power supply
63	—	–	Not used
64	VSS	–	Ground
65	A7	O	Video mute output “L”
66 to 71	A6 to A1	I	Not used
72	U to I	I	IIC convertion microcomputor transmittion input
73	TEST LED	O	TEST LED for MPEG decoder
74	TEST 1	I	Test mode for Video CD check
75	TEST 2	I	Test mode for servo check
76	TEST 3	I	Not used
77	DEVICE RESET	O	Device system rest output “L” : reset
78	STANDBY	I	Not used
79	FL CS	I	Not used
80	FL	I	Not used
81 to 88	D7 to D0	I	Not used
89	MIC CTRL	I	Not used
90	KEY 1	I	Not used
91	KEY 2	I	Not used
92	KEY 3	I	Not used
93	NY/PAL	I	NTSC/PAL select switch input
94	MUSIC VOL	I	Not used
95	KEY 4	I	Not used
96	AVSS	–	A/D converter ground
97	MODE. SW	I	Not used
98	VREF	I	A/D converter reference voltage input (Connected to +5V)
99	AVCC	–	A/D converter +5V power supply
100	AMP. ON	I	Not used

• VIDEO(2/3)BOARD IC505 CD DECODER, SYSTEM CONTROL (CL680T-D1)

Pin No.	Pin Name	I/O	Function
1	NC	–	Not used
2	VSS	–	Ground
3	CD-BCK	I	CD Decode bit clock
4	CD-DATA	I	CD Decode data
5	CD-LRCK	I	CD Decode Left or Right channel selection clock
6	CD-C2PO	I	CD Decode C2 error data
7	NC	–	Not used
8	NC	–	Not used
9	NC	–	Not used
10	MD0	I/O	Data bus between Microcode ROM/DRAM and CL680
11	MD1	I/O	Data bus between Microcode ROM/DRAM and CL680
12	MD2	I/O	Data bus between Microcode ROM/DRAM and CL680
13	MD3	I/O	Data bus between Microcode ROM/DRAM and CL680
14	MD4	I/O	Data bus between Microcode ROM/DRAM and CL680
15	MD5	I/O	Data bus between Microcode ROM/DRAM and CL680
16	VSS	–	Ground
17	MD6	I/O	Data bus between Microcode ROM/DRAM and CL680
18	VDD3	–	+3.3V Power supply
19	MD7	I/O	Data bus between Microcode ROM/DRAM and CL680
20	VSS	–	Ground
21	MD8	I/O	Data bus between Microcode ROM/DRAM and CL680
22	VDD3	–	+3.3V Power supply
23	MD9	I/O	Data bus between Microcode ROM/DRAM and CL680
24	MD10	I/O	Data bus between Microcode ROM/DRAM and CL680
25	MD11	I/O	Data bus between Microcode ROM/DRAM and CL680
26	MD12	I/O	Data bus between Microcode ROM/DRAM and CL680
27	MD13	I/O	Data bus between Microcode ROM/DRAM and CL680
28	MD14	I/O	Data bus between Microcode ROM/DRAM and CL680
29	MD15	I/O	Data bus between Microcode ROM/DRAM and CL680
30	NC	–	Not used
31	NC	–	Not used
32	NC	–	Not used
33	NC	–	Not used
34	NC	–	Not used
35	NC	–	Not used
36	NC	–	Not used
37	$\overline{\text{MCE}}$	O	Chip enable signal to Microcode ROM
38	$\overline{\text{MWE}}$	O	Write enable signal to DRAM
39	VSS	–	Ground
40	CAS	O	Column address strove : Latch the column address to DRAM
41	VDD3	–	+3.3V power supply
42	RAS0	O	Row address strove : Latch row address to DRAM
43	RAS1	–	Not used
44	MA10	O	Address data from CL680 to Microcode ROM
45	MA9	O	Address data from CL680 to Microcode ROM

Pin No.	Pin Name	I/O	Function
46	MA8	O	Address data from CL680 to Microcode ROM/DRAM
47	VSS	–	Ground
48	MA7	O	Address data from CL680 to Microcode ROM/DRAM
49	VDD3	–	+3.3V Power supply
50	MA6	O	Address data from CL680 to Microcode ROM/DRAM
51	MA5	O	Address data from CL680 to Microcode ROM/DRAM
52	MA4	O	Address data from CL680 to Microcode ROM/DRAM
53	VSS	–	Ground
54	MA3	O	Address data from CL680 to Microcode ROM/DRAM
55	VDD3	–	+3.3V Power supply
56	MA2	O	Address data from CL680 to Microcode ROM/DRAM
57	MA1	O	Address data from CL680 to Microcode ROM/DRAM
58	MA0	O	Address data from CL680 to Microcode ROM/DRAM
59	PGIO7	I/O	Not used
60	RESET	I	Reset signal input from the host MPU
61	VDDMAX-IN	I	Fix the maxium input voltage each input pin and I/O pin
62	NC	–	Not used
63	NC	–	Not used
64	NC	–	Not used
65	AGND DAC	–	Ground
66	AVDD DAC	–	+3.3V Power supply
67	COMPOS OUT	O	Not used
68	AGND DAC	–	Ground
69	Y-OUT	O	Luminance signal out
70	AVDD DAC	–	+3.3V Power supply
71	AGND DAC	–	Ground
72	RREF	I	Fix the video signal output level
73	(1.235V)VREF	O	Reference voltage (+1.235V)
74	AVDD DAC	–	+3.3V Power supply
75	C-OUT	O	Chrominance signal out
76	AGND DAC	–	Ground
77	(GCK INT)CLK SEL	I	GCK selection “H”; Internal, “L”; External
78	CLK SEL	I	DA-XCK selection (1)
79	CLK SEL	I	DA-XCK selection (2)
80	VSS	–	Ground
81	RESERVED	I	Selection the operation clock 42.336MHz
82	VDD3	–	+3.3V Power supply
83	DA-EMP	–	Not used
84	RESERVED	–	Not used
85	AGND PLL	–	Ground
86	DA-XCLK	I	Main reference clock input (16.9344MHz=384fs)
87	AVDD PLL	–	+3.3V
88	PGIO4	I/O	Not used
89	PGIO5	I/O	Not used
90	PGIO6	I/O	Not used

Pin No.	Pin Name	I/O	Function
91	PGIO0	I/O	Not used
92	PGIO8	I/O	Not used
93	PGIO2/$\overline{\text{VSYNC}}$/ CSYNC	O	Vertical synchronized signal of video signal
94	AVDD PLL	–	+3.3V Power supply
95	NC	–	Not used
96	NC	–	Not used
97	NC	–	Not used
98	AGND PLL	–	Ground
99	VSS	–	Ground
100	NC	–	Not used
101	PGIO3/$\overline{\text{HSYNC}}$	I/O	Not used
102	VDD3	–	+3.3V Power supply
103	PGIO1/VCK-OUT	I/O	Not used
104	VSS	–	Ground
105	GCK	I	Not used
106	VCK-IN	I	Main clock for video signal processer
107	GCKOUT/DA-EMP	O	Not used
108	DA-LRCK	O	Digital Audio Left or Right channel selection clock
109	VDDMAX-OUT	O	Fix the maxium output voltage certain output pins (Connected to +5V)
110	DA-DATA	O	Digital Audio data
111	DA-BCK	O	Digital Audio bit clock
112	HD-OUT	O	Serial Data output from CL680 to the host MPU
113	HRDY	O	Ready signal CL680 is ready for communication to the host MPU
114	$\overline{\text{HINT}}$	O	Request signal for interrupting the host MPU
115	CDG-SCK	I/O	Not used
116	VSS	–	Ground
117	HCK	I	Host clock : referance signal for the host bus interface
118	VDD3	–	+3.3V Power supply
119	HD-IN	I	Serial Data output ftom the host MPU to CL680
120	VDD3	–	+3.3V Power supply
121	HSEL	I	Select data or address of the host MPU
122	CDG-SDATA	I	Ground (Not used)
123	CDG-VFSY	I	Ground (Not used)
124	CDG-SOS1	I	Ground (Not used)
125	NC	–	Not used
126	NC	–	Not used
127	NC	–	Not used
128	NC	–	Not used

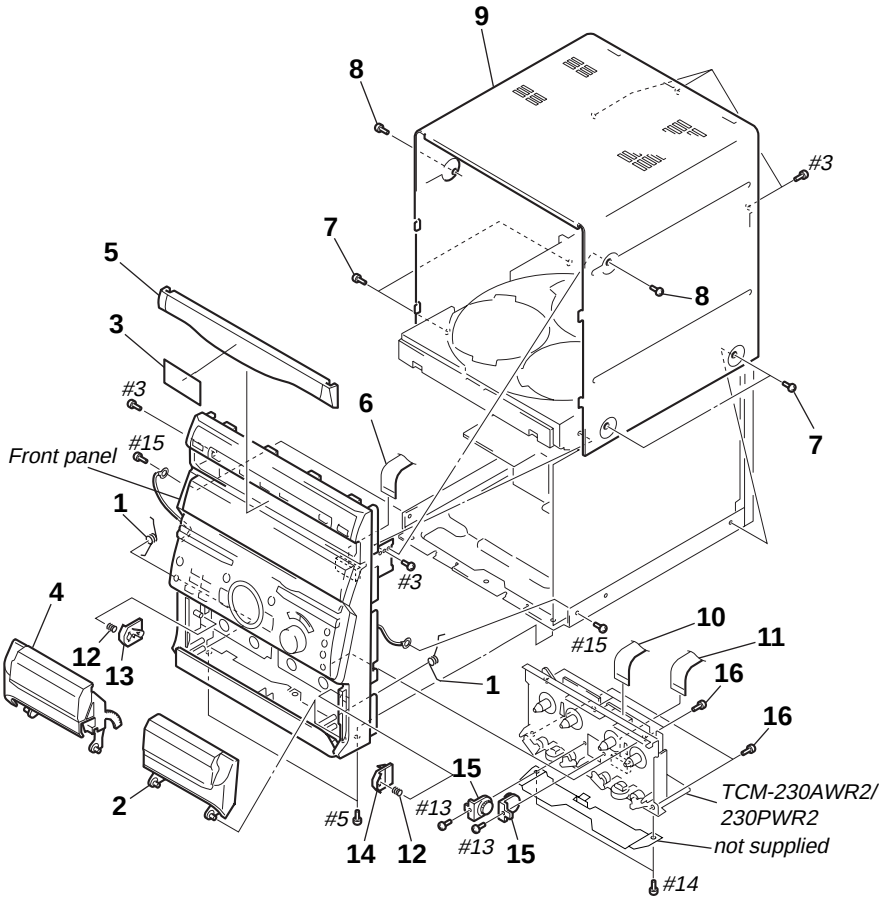
SECTION 8
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  IA : Indonesia model
  TH : Thai model
  TW : Taiwan model
  JE : Tourist model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

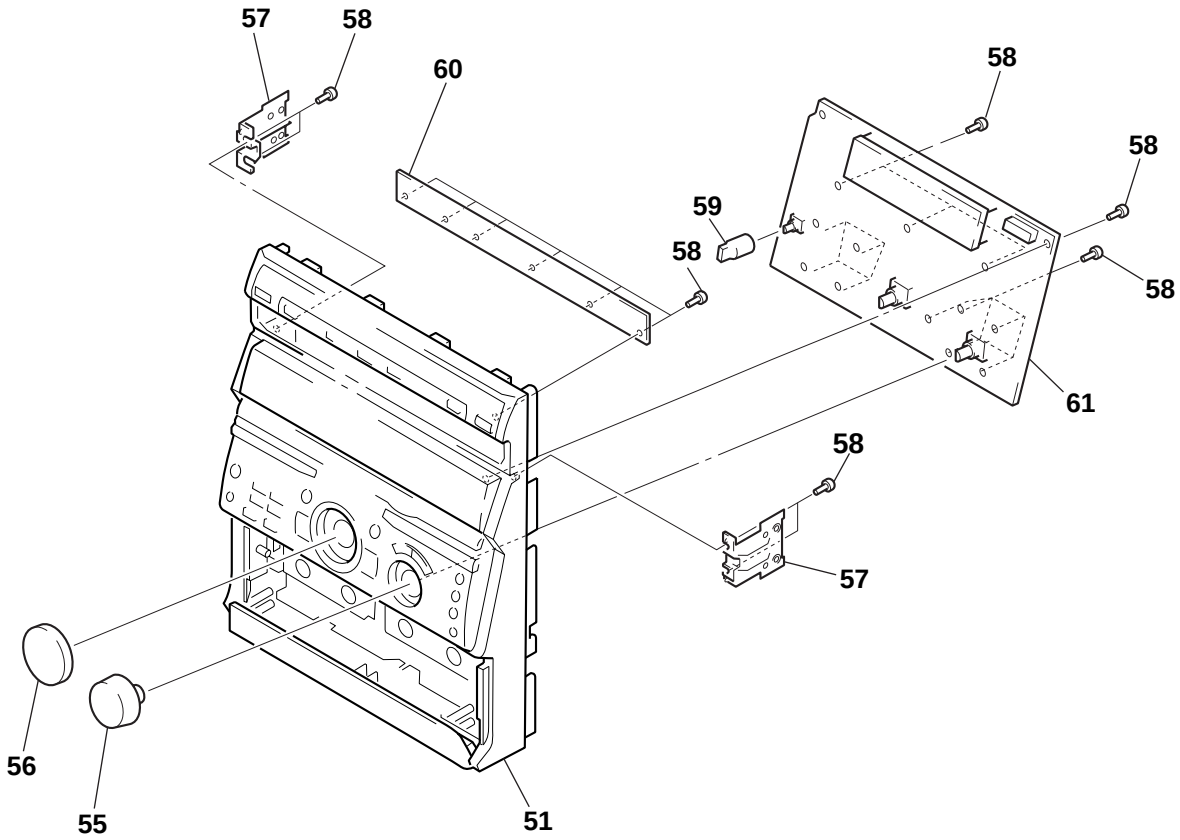
8-1. CASE SECTION



Ref. No.	Part No.	Description	Remarks
1	4-219-087-01	SPRING, TENSION	
2	X-4950-698-1	HOLDER (R) ASSY, CASSETTE (IA)	
2	X-4950-832-1	HOLDER (R) ASSY, CASSETTE (TH)	
2	X-4950-971-1	HOLDER (R) ASSY, CASSETTE (EA/E/JE)	
2	X-4951-068-1	HOLDER (R) ASSY, CASSETTE (MY/SP/TW)	
3	4-991-781-01	EMBLEM (VCD)	
4	X-4950-697-1	HOLDER (L) ASSY, CASSETTE (IA)	
4	X-4950-828-1	HOLDER (L) ASSY, CASSETTE (TH)	
4	X-4950-970-1	HOLDER (L) ASSY, CASSETTE (EA/E/JE)	
4	X-4951-067-1	HOLDER (L) ASSY, CASSETTE (MY/SP/TW)	
5	X-4951-437-1	LOADING PANEL ASSY (SP/TW)	
5	X-4951-530-1	LOADING PANEL ASSY (EA/E/JE)	
5	X-4951-804-1	LOADING PANEL ASSY (TH)	
5	X-4951-805-1	LOADING PANEL ASSY (IA)	
6	1-773-120-11	WIRE(FLAT TYPE) (19 CORE)(MY/SP/TW)	
7	3-363-099-01	SCREW(CASE 3 TP2)(EA/E/JE)	

Ref. No.	Part No.	Description	Remarks
7	3-363-099-11	SCREW(CASE 3 TP2)(MY/SP/TW/TH/IA)	
8	3-363-099-31	SCREW(CASE 3 TP2)(EA/E/JE)	
8	3-363-099-71	SCREW(CASE 3 TP2)(MY/SP/TW/TH/IA)	
9	4-221-585-41	CASE(S)(MY/SP/TW)	
9	4-221-585-61	CASE(S)(EA/E/JE)	
9	4-221-295-41	CASE(IA)	
9	4-221-295-61	CASE(TH)	
10	1-773-043-11	WIRE(FLAT TYPE)(17 CORE)	
11	1-773-024-11	WIRE(FLAT TYPE)(15 CORE)	
12	4-214-775-01	SPRING, PUSH CATCHER RETURN (EA/E/JE/MY/SP/TW/TH)	
12	4-214-775-02	SPRING, PUSH CATCHER RETURN (IA)	
13	4-214-761-11	CATCHER (B), PUSH	
14	4-214-760-11	CATCHER (A), PUSH	
15	4-215-062-01	DAMPER	
16	4-951-620-01	SCREW (2.6 × 8), +BVTP	

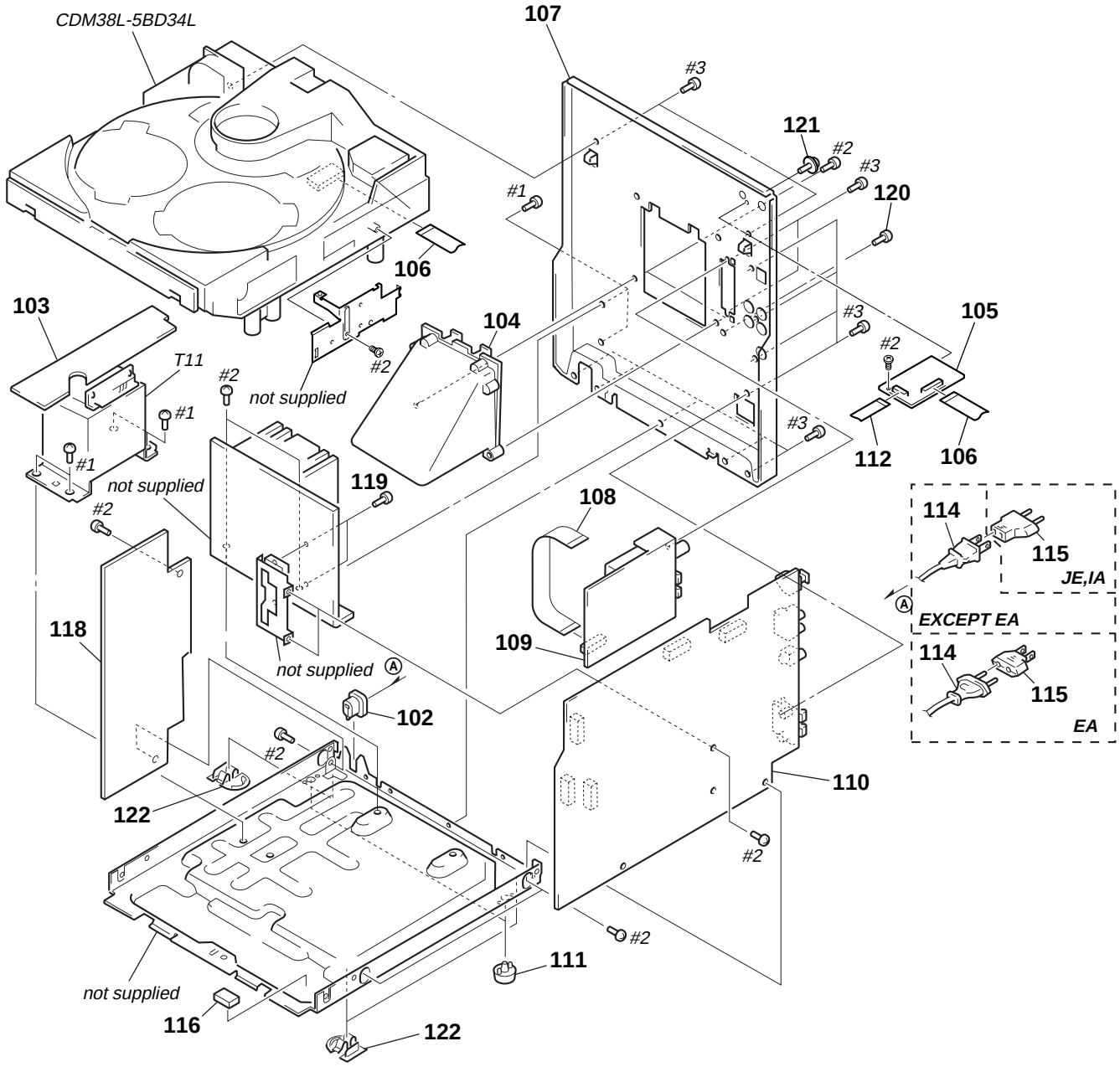
8-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks
51	X-4951-436-1	FRONT PANEL ASSY (TH/IA)	
51	X-4951-436-2	FRONT PANEL ASSY (MY/SP/TW)	
51	X-4951-529-1	FRONT PANEL ASSY (JE)	
51	X-4951-529-2	FRONT PANEL ASSY (EA/E)	
55	4-214-384-11	KNOB(VOL)(MY/SP/TW/TH/IA)	
55	4-214-384-51	KNOB(VOL)(EA/E/JE)	
56	4-214-383-11	KNOB(JOG)(MY/SP/TW/TH/IA)	
56	4-214-383-51	KNOB(JOG)(EA/E/JE)	

Ref. No.	Part No.	Description	Remarks
57	4-996-716-01	HOLDER (CDM)	
58	4-951-620-01	SCREW (2.6 × 8), +BVTP	
59	4-214-385-11	KNOB(MIC)(MY/SP/TW/TH/IA)	
59	4-214-385-51	KNOB(MIC)(EA/E/JE)	
60	1-672-968-11	CD SW BOARD	
61	A-4419-652-A	PANEL BOARD (EA/E/JE/MY/SP/TW)	
61	A-4426-187-A	PANEL BOARD (IA)	
61	A-4426-195-A	PANEL BOARD (TH)	

8-3. CHASSIS SECTION

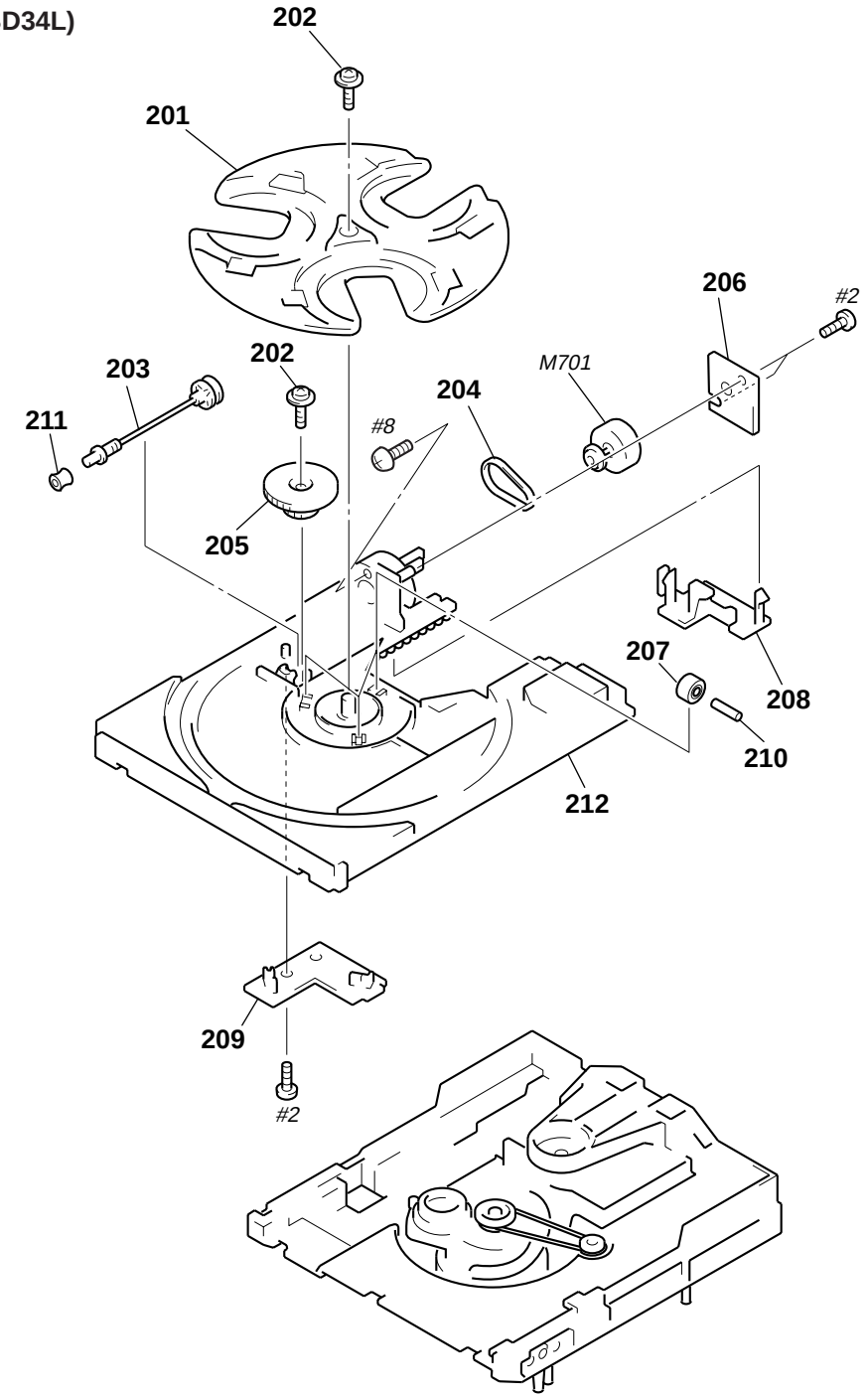


Ref. No.	Part No.	Description	Remarks
* 102	3-703-244-00	BUSHING (2104), CORD	
103	1-672-969-11	AC SEC BOARD	
104	4-216-856-01	DUCT	
105	A-4724-727-A	VIDEO BOARD, COMPLETE (EXCEPT TH)	
105	A-4724-825-A	VIDEO BOARD, COMPLETE (TH)	
106	1-775-212-11	WIRE (FLAT TYPE)(23 CORE)	
107	4-214-432-41	BACK PANEL (TH)	
107	4-214-432-31	BACK PANEL (EXCEPT TH)	
108	1-773-008-11	WIRE (FLAT TYPE)(15 CORE)	
109	1-233-545-14	ENCAPSULATED COMPONENT (TH)	
109	1-233-546-11	TUNER (FM/MW/SW)(EXCEPT TH)	
110	A-4405-974-A	MAIN BOARD, COMPLETE (EA/E/JE/MY/SP/TW)	
110	A-4424-103-A	MAIN BOARD, COMPLETE (IA)	
110	A-4424-105-A	MAIN BOARD, COMPLETE (TH)	

Ref. No.	Part No.	Description	Remarks
111	4-965-822-01	FOOT	
112	1-690-589-31	WIRE(FLAT TYPE)(13 CORE)	
⚠114	1-575-653-11	CORD, POWER (EXCEPT EA)	
⚠114	1-777-071-21	CORD, POWER (EA)	
⚠115	1-569-007-11	ADAPTOR, CONVERSION 2P (JE/IA)	
⚠115	1-569-008-21	ADAPTOR, CONVERSION 2P (EA)	
116	4-985-642-01	CUSHION	
118	A-4419-037-A	ST-BY BOARD, COMPLETE (EXCEPT TH)	
118	A-4419-965-A	ST-BY BOARD, COMPLETE(TH)	
119	4-221-078-01	SCREW +BSW 3 × 20(S)	
120	4-909-982-11	SCREW, TAPPING	
121	4-981-789-01	BRACKET (2), YOKE	
122	4-216-851-01	COVER (LIZ)	
⚠T11	1-433-902-11	TRANSFORMER, POWER	

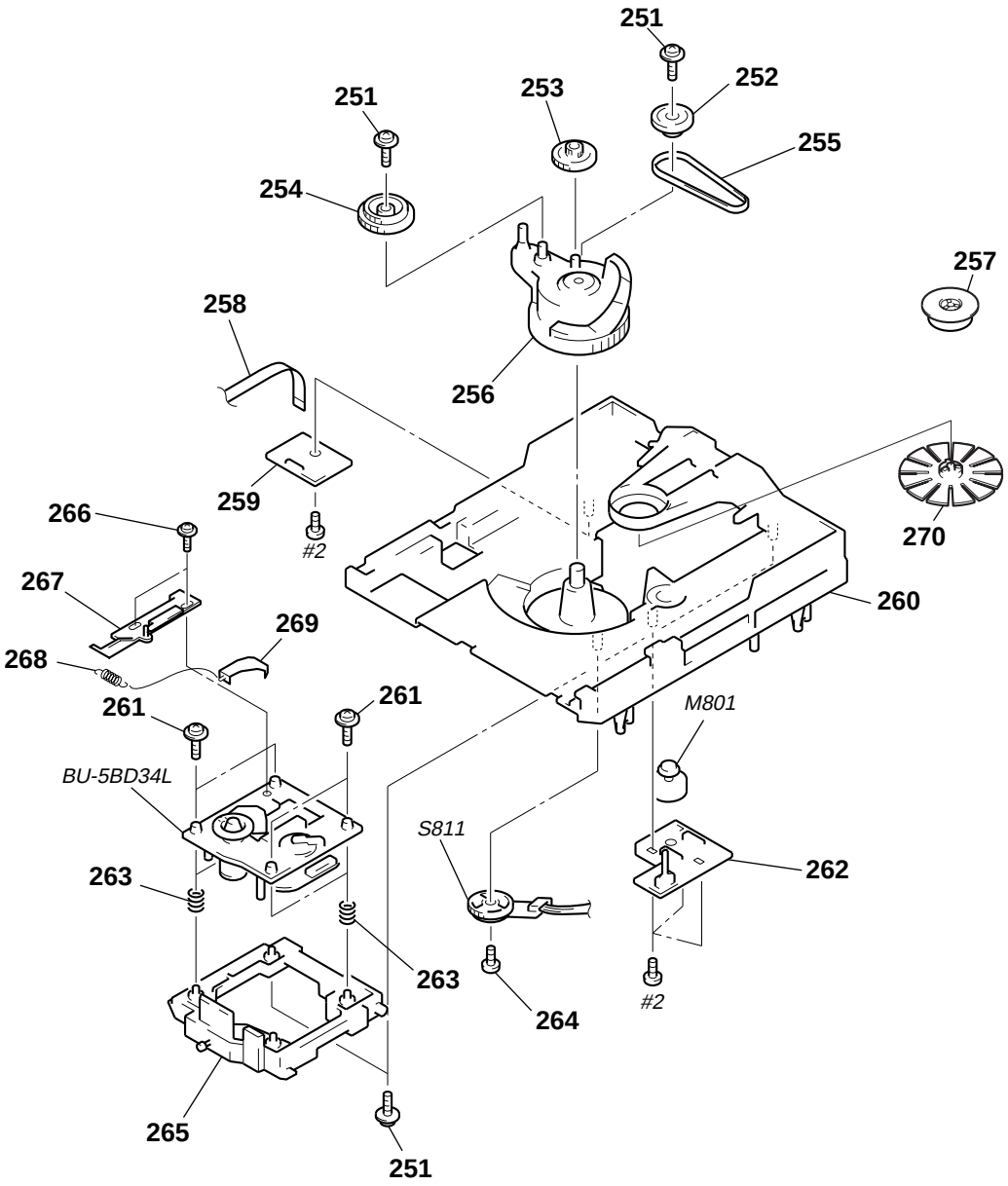
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

8-4. CD MLH-5BDECHANISM DECK SECTION-1 (CDM38L-5BD34L)



Ref. No.	Part No.	Description	Remarks
201	4-977-954-01	TRAY (TURN)(IA)	
201	4-977-954-63	TRAY (TURN)(EXCEPT IA)	
202	4-917-583-71	BRACKET, YOKE	
203	X-4946-665-1	SHAFT ASSY, WORM	
204	4-977-943-01	BELT (TURN)(1.2)	
205	4-977-956-01	WHEEL, WORM	
* 206	1-658-577-11	MOTOR (TURN) BOARD	
207	4-988-162-01	ROLLER	
208	4-977-941-01	BEARING (WORM)	
* 209	1-658-576-11	SENSOR BOARD	
210	4-934-376-01	SHAFT (ROLLER)	
211	4-981-187-01	COLLAR (WORM)	
212	4-977-944-01	TRAY (SLIDE)	
M701	A-4672-004-A	MOTOR ASSY(TURN)	

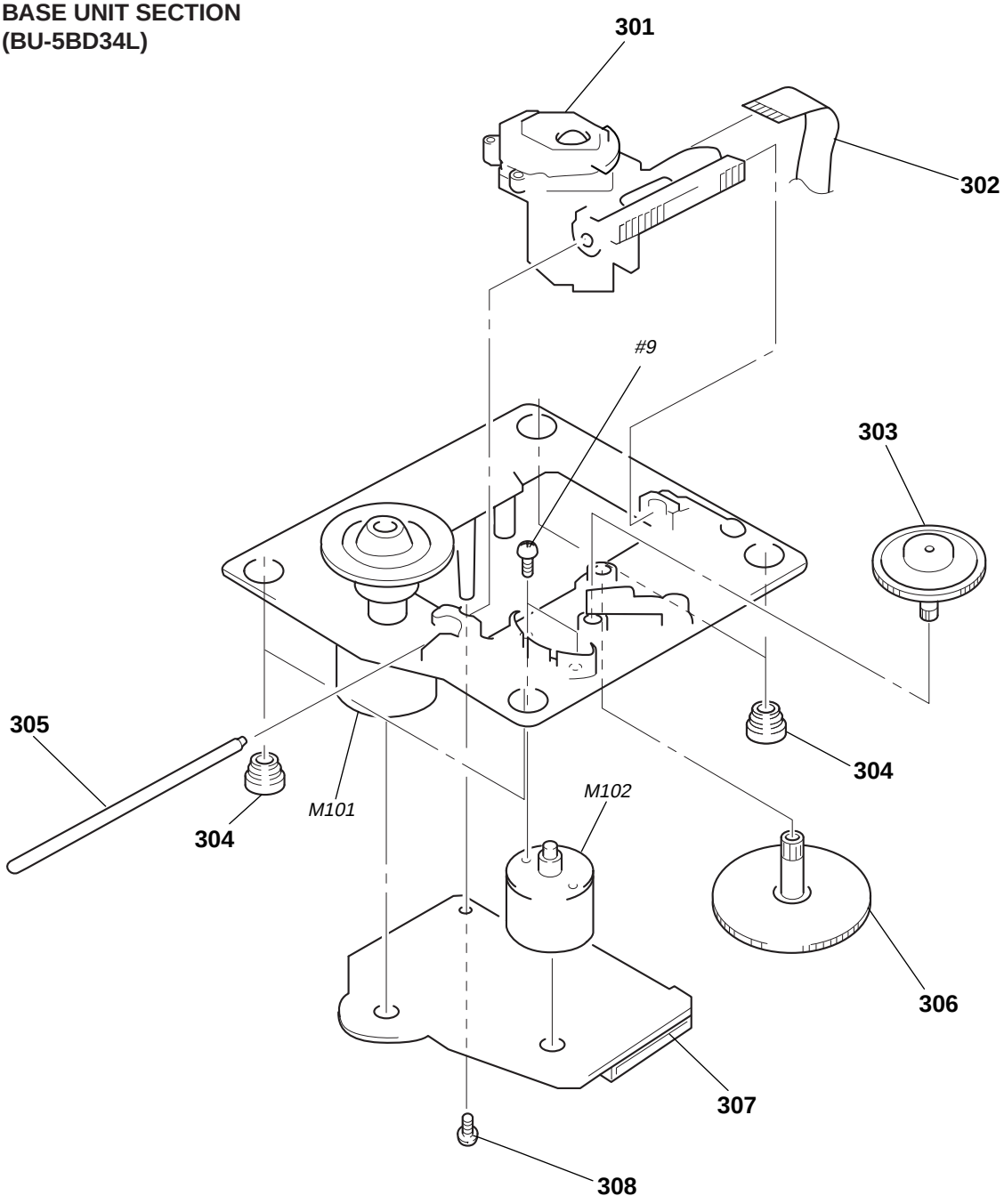
8-5. CD MECHANISM DECK SECTION-2
(CDM38L-5BD34L)



Ref. No.	Part No.	Description	Remarks
251	4-981-789-01	BRACKET (2), YOKE	
252	4-977-954-01	PULLEY (SL)	
253	4-977-953-01	GEAR (SL-A)	
254	4-977-955-01	GEAR (SL-B)	
255	4-977-942-01	BELT (SL)(1.4)	
256	X-4946-491-1	CAMASSY, BU	
257	1-452-925-21	MAGNET ASSY	
258	1-776-642-11	WIRE (FLAT TYPE)(8 CORE)	
* 259	1-658-975-11	CONNECTOR BOARD	
260	X-4950-020-1	CHASSIS (CDM) ASSY (IA)	
260	X-4950-020-2	CHASSIS (CDM) ASSY (EXCEPT IA)	
261	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	

Ref. No.	Part No.	Description	Remarks
* 262	1-658-578-11	MOTOR (SLIDE) BOARD	
263	4-982-447-01	SPRING (BU), COMPRESSION	
264	4-951-620-41	SCREW (2.6), +BVTP	
265	X-4949-570-1	HOLDER (BU) ASSY (EXCEPT IA)	
* 265	X-4946-666-1	HOLDER (BU) ASSY (IA)	
266	4-989-494-01	SCREW (SLIDER), STEP	
267	4-989-492-11	SLIDER (38)	
268	4-989-819-02	SPRING, TENSION	
269	4-989-491-11	COVER (2), LENS	
270	4-993-142-03	PULLEY (L), PRESS (IA)	
270	4-993-142-21	PULLEY (L), PRESS (EXCEPT IA)	
M801	A-4672-004-A	MOTOR ASSY	
S811	1-473-335-11	ENCODER, ROTARY	

8-6. BASE UNIT SECTION (BU-5BD34L)



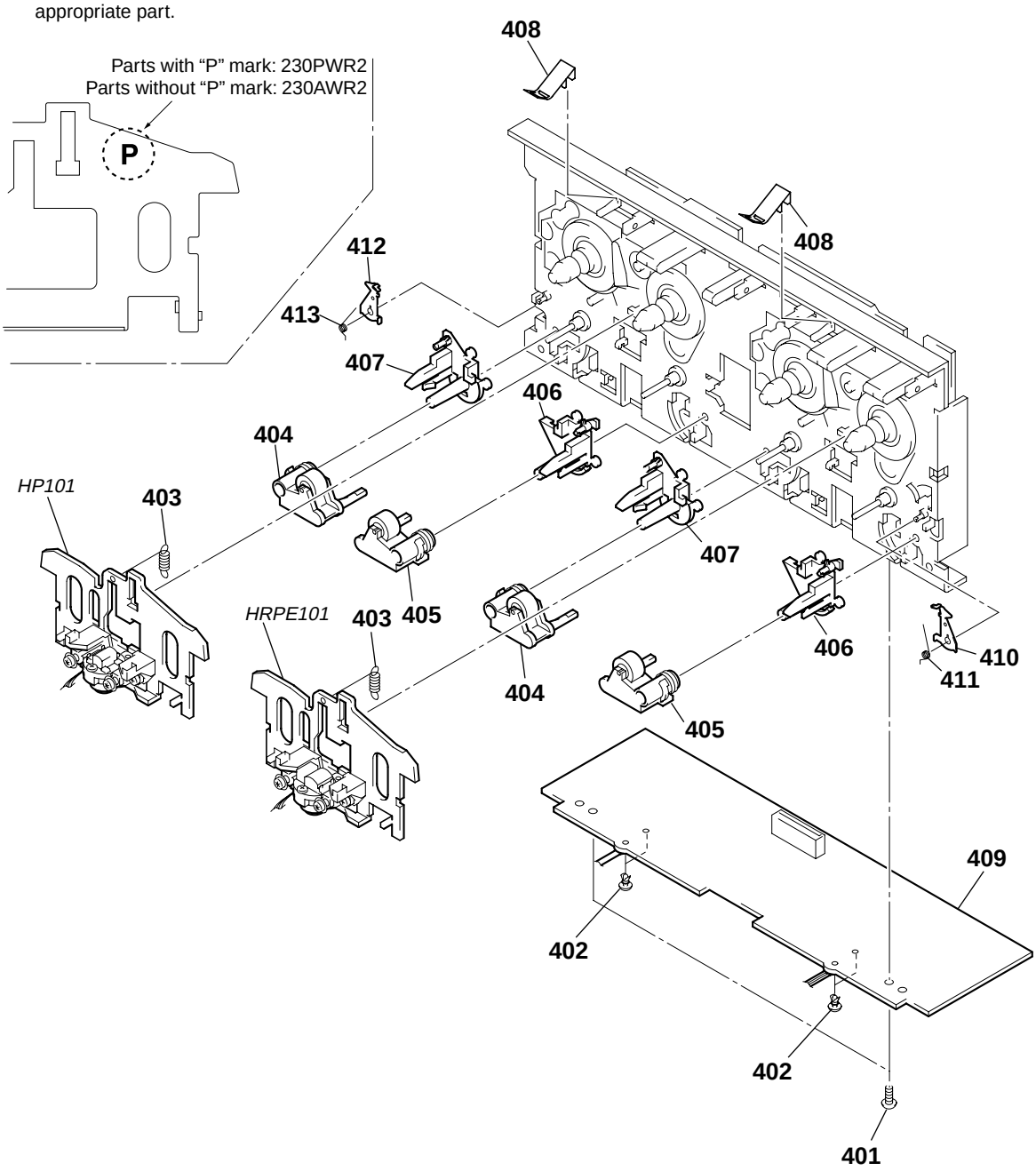
Ref. No.	Part No.	Description	Remarks
⚠301	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-RP	
302	1-769-069-11	WIRE (FLAT TYPE)(16 CORE)	
303	4-917-567-01	GEAR (M)	
304	4-951-940-01	INSULATOR (BU)	
305	4-917-565-01	SHAFT, SLED	
306	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remarks
307	A-4724-640-A	BD BOARD (A)(EXCEPT IA)	
307	A-4724-653-A	BD BOARD (A)(IA)	
308	4-951-620-41	SCREW (2.6), +BVTP	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

8-7. TC MECHANISM SECTION-1 (TCM230AWR2/230PWR2)

*NOTE: Two types of parts which are not interchangeable are available for the Head deck (A) ASSY and Head deck (B) ASSY. When replacing the parts, refer to the following figure, and use the appropriate part.

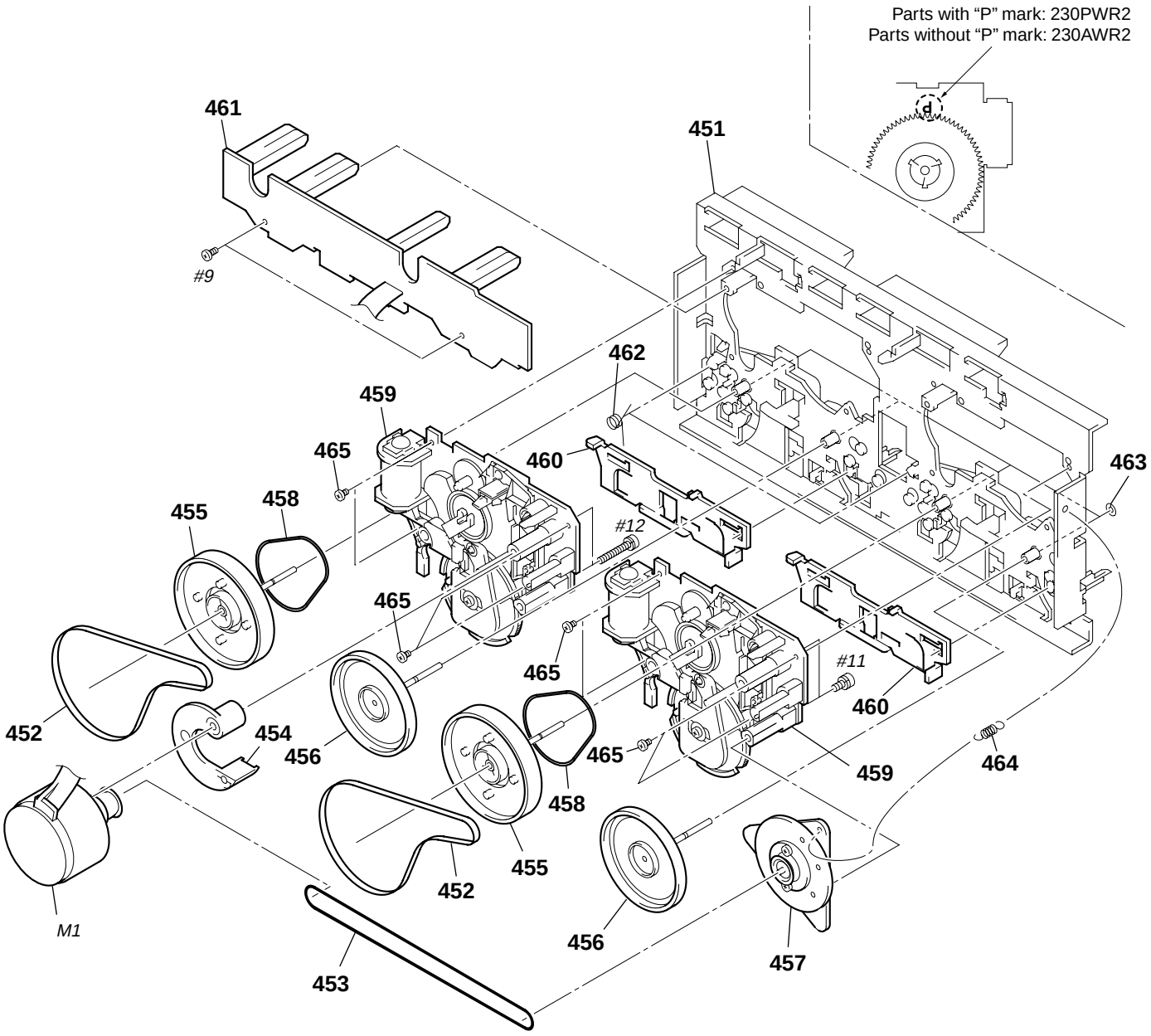


Ref. No.	Part No.	Description	Remarks
401	3-376-464-11	SCREW(+PTT 2.6 × 6),GROUND POINT	
402	3-036-914-01	RIVET	
403	3-016-574-11	SPRING (HEAD), TENSION	
404	X-3374-156-4	PINCH LEVER (REV) ASSY	
405	X-3374-155-4	PINCH LEVER (FWD) ASSY	
406	3-016-564-01	BASE (PINCH LEVER FWD)	
407	3-016-565-01	BASE (PINCH LEVER REV)	
408	3-026-892-01	SPRING (CASSETTE), LEAF	
* 409	A-2007-731-A	AUDIO BOARD, COMPLETE (EXCEPT IA)	

Ref. No.	Part No.	Description	Remarks
409	A-2007-799-A	AUDIO BOARD, COMPLETE (IA)	
410	3-016-573-01	LEVER (EJECT PREVENTION R)	
411	3-032-810-02	SPRING (R), TORSION	
412	3-016-572-01	LEVER (EJECT PREVENTION L)	
413	3-032-809-02	SPRING (L), TORSION	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)(*NOTE)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)(*NOTE)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)(*NOTE)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)(*NOTE)	

8-8. TC MECHANISM SECTION-2 (TCM230AWR2/230PWR2)

*NOTE: Two types of parts which are not interchangeable are available for the mechanical block assembly. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remarks
451	X-3374-214-1	CHASSIS ASSY, MAIN (IA)	
* 451	X-3374-214-3	CHASSIS ASSY, MAIN (EA/E/JE/MY/SP/TW/TH)	
452	3-016-570-01	BELT (CAPSTAN)	
453	3-016-569-01	BELT (TENSION)	
454	3-017-360-01	BRACKET (MOTOR)	
455	X-3376-497-1	FLYWHEEL (FWD) ASSY	
456	X-3374-235-1	FLYWHEEL (REV) ASSY	
457	X-3374-238-1	PULLEY ASSY, TENSION	
458	3-024-405-01	BELT (FR2)	
459	A-2004-629-A	MECHANICAL BLOCK ASSY(230AWR2)(*NOTE)	

Ref. No.	Part No.	Description	Remarks
459	A-2004-629-B	MECHANICAL BLOCK ASSY(230PWR2)(*NOTE)	
460	3-016-566-01	SLIDER, REVERSE	
* 461	A-2007-732-A	LEAF SW BOARD, COMPLETE (EXCEPT IA)	
461	A-2007-800-A	LEAF SW BOARD, COMPLETE (IA)	
462	3-016-575-11	SPRING, TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	3-027-453-01	SPRING (GROUND), TENSION	
465	3-030-823-01	SCREW (+BVTT) (2 × 3.5)	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	

SECTION 9
ELECTRICAL PARTS LIST

AC SEC **AUDIO**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Abbreviation
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  IA : Indonesia model
  TH : Thai model
  TW : Taiwan model
  JE : Tourist model
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description			Remarks
	1-672-969-11	AC SEC BOARD			
		**********			
	1-533-217-31	HOLDER, FUSE			
		< CONNECTOR >			
* CN21	1-564-526-11	PLUG, CONNECTOR 11P			
		< FUSE >			
⚠F953	1-532-506-31	FUSE 6.3A 250V			
⚠F954	1-532-506-31	FUSE 6.3A 250V			
⚠F955	1-532-504-31	FUSE 4.0A 250V			
⚠F956	1-532-504-31	FUSE 4.0A 250V			
		< RESISTOR >			
⚠R951	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
⚠R952	1-219-122-91	FUSIBLE	0.33	5%	1/4W F
⚠R953	1-219-121-91	FUSIBLE	0.22	5%	1/4W F
**********					
*	A-2007-731-A	AUDIO BOARD, COMPLETE (EXCEPT IA)			
		**********			
	A-2007-799-A	AUDIO BOARD, COMPLETE (IA)			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-104-396-11	ELECT	10uF	20%	16V
C612	1-104-396-11	ELECT	10uF	20%	16V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
CN601	1-568-834-11	SOCKET, CONNECTOR 15P			
		< IC >			
IC601	8-759-111-44	IC uPC4570C-1			
IC602	8-759-143-54	IC uPC1330HA			
IC611	8-759-111-44	IC uPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR 27mH			
L431	1-410-780-11	INDUCTOR 27mH			
L601	1-414-193-41	INDUCTOR 220uH			
L602	1-414-193-41	INDUCTOR 220uH			
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR 2SC2001TP-LK			
Q622	8-729-142-46	TRANSISTOR 2SC2001TP-LK			
Q623	8-729-801-93	TRANSISTOR 2SD1387-34-TP			
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-249-409-11	CARBON	220	5%	1/4W F
R303	1-249-433-11	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-249-409-11	CARBON	220	5%	1/4W F
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W

AUDIO BD

Ref. No.	Part No.	Description			Remarks
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R601	1-249-409-11	CARBON	220	5%	1/4W F
R602	1-249-409-11	CARBON	220	5%	1/4W F
R608	1-249-409-11	CARBON	220	5%	1/4W F
R609	1-249-433-11	CARBON	22K	5%	1/4W
R611	1-249-409-11	CARBON	220	5%	1/4W F
R612	1-249-409-11	CARBON	220	5%	1/4W F
R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K (PB LEVEL/L)			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K (PB LEVEL/L)			
RV341	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS/L)			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K (PB LEVEL/R)			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K (PB LEVEL/R)			
RV441	1-241-768-11	RES, ADJ, CARBON 220K (REC BIAS/R)			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			

****

	A-4724-640-A	BD BOARD, COMPLETE (EXCEPT IA)			
		**********			
	A-4724-653-A	BD BOARD, COMPLETE (IA)			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C105	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-346-11	CERAMIC CHIP	1uF		16V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C110	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C119	1-163-110-00	CERAMIC CHIP	51PF	5%	50V
C120	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C121	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C122	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C124	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C126	1-124-779-00	ELECT CHIP	10uF	20%	16V
C130	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C140	1-163-038-91	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remarks
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C161	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C162	1-128-065-11	ELECT CHIP	68uF	20%	10V
C170	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C171	1-163-038-91	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN101	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC101	8-752-397-42	IC CXD3008Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
IC104	8-759-398-25	IC TC7SH04F(TE85L)			
		< COIL >			
L101	1-414-234-22	INDUCTOR CHIP 0uH			
L102	1-410-377-31	INDUCTOR CHIP 4.7uH			
		< TRANSISTOR >			
Q101	8-729-049-31	TRANSISTOR 2SB710-RTX			
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-216-295-91	SHORT 0			
R112	1-216-049-91	RES,CHIP	1K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R125	1-216-037-00	METAL CHIP	330	5%	1/10W
R126	1-216-037-00	METAL CHIP	330	5%	1/10W
R127	1-216-037-00	METAL CHIP	330	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R135	1-216-295-91	SHORT 0			
R136	1-216-295-91	SHORT 0			
R137	1-216-295-91	SHORT 0			
R138	1-216-295-91	SHORT 0			
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R145	1-216-121-91	RES,CHIP	1M	5%	1/10W
R146	1-216-121-91	RES,CHIP	1M	5%	1/10W
R147	1-216-041-00	METAL CHIP	470	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-003-11	RES,CHIP	12	5%	1/10W
R150	1-216-073-00	METAL CHIP	10K	5%	1/10W
R154	1-216-025-91	RES,CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R155	1-216-025-91	RES,CHIP	100	5%	1/10W
R156	1-216-025-91	RES,CHIP	100	5%	1/10W
R157	1-216-025-91	RES,CHIP	100	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-089-91	RES,CHIP	47K	5%	1/10W
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-025-91	RES,CHIP	100	5%	1/10W
R172	1-216-025-91	RES,CHIP	100	5%	1/10W
R173	1-216-025-91	RES,CHIP	100	5%	1/10W
R175	1-216-025-91	RES,CHIP	100	5%	1/10W
R203	1-216-025-91	RES,CHIP	100	5%	1/10W
R204	1-216-025-91	RES,CHIP	100	5%	1/10W
R205	1-216-025-91	RES,CHIP	100	5%	1/10W
R206	1-216-295-91	SHORT 0			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
	1-672-968-11	CD SW BOARD			
		**********			
		< DIODE >			
D751	8-719-056-13	DIODE SML79423C-TP15(DISK1)			
D752	8-719-056-13	DIODE SML79423C-TP15(DISK2)			
D753	8-719-056-13	DIODE SML79423C-TP15(DISK3)			
D754	8-719-063-93	DIODE SLR325VC-N-T32(POWER)			
		< TRANSISTOR >			
Q751	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q752	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q753	8-729-904-39	TRANSISTOR BA1A4Z-TP			
		< RESISTOR >			
R751	1-249-418-11	CARBON	1.2K	5%	1/4W F
R752	1-249-420-11	CARBON	1.8K	5%	1/4W F
R753	1-249-422-11	CARBON	2.7K	5%	1/4W F
R754	1-247-843-11	CARBON	3.3K	5%	1/4W
R755	1-249-425-11	CARBON	4.7K	5%	1/4W F
R756	1-249-427-11	CARBON	6.8K	5%	1/4W F
R757	1-249-429-11	CARBON	10K	5%	1/4W
R758	1-247-804-11	CARBON	75	5%	1/4W
R759	1-247-804-11	CARBON	75	5%	1/4W
R760	1-247-804-11	CARBON	75	5%	1/4W
R761	1-247-804-11	CARBON	75	5%	1/4W
R762	1-247-804-11	CARBON	75	5%	1/4W
R763	1-247-804-11	CARBON	75	5%	1/4W
R764	1-249-407-11	CARBON	150	5%	1/4W F
		< SWITCH >			
S751	1-762-196-21	SWITCH, TACT(POWER)			
S752	1-762-196-21	SWITCH, TACT(STANDBY/DEMO)			
S753	1-762-196-21	SWITCH, TACT(DISK1)			
S754	1-762-196-21	SWITCH, TACT(DISK2)			
S755	1-762-196-21	SWITCH, TACT(DISK3)			
S756	1-762-196-21	SWITCH, TACT(DISK SKIP EX-CHANGE)			
S757	1-762-196-21	SWITCH, TACT(EJECT)			
**********					

Ref. No.	Part No.	Description			Remarks
*	1-658-575-11	CONNECTOR BOARD			
		**********			
		< CONNECTOR >			
* CN701	1-568-946-11	PIN, CONNECTOR 8P			
CN702	1-750-413-11	CONNECTOR, FFC/FPC 8P			
CN702	1-785-550-11	CONNECTOR, FFC/FPC 8P			
		< TRANSISTOR >			
Q701	8-729-900-80	TRANSISTOR	BA1A4M-TP		
		< RESISTOR >			
R703	1-249-435-11	CARBON	33K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W F
**********					
*	A-2007-732-A	LEAF SW BOARD, COMPLETE (EXCEPT IA)			
		**********			
	A-2007-800-A	LEAF SW BOARD, COMPLETE (IA)			
		**********			
		< CAPACITOR >			
C1001	1-107-716-11	ELECT	33uF	20%	10V
		< CONNECTOR >			
CN1001	1-568-860-11	SOCKET, CONNECTOR 17P			
		< DIODE >			
D1001	8-719-911-19	DIODE 1SS133T-72			
D1002	8-719-911-19	DIODE 1SS133T-72			
		< IC >			
IC1001	8-749-014-38	PHOTO INTERRUPTER SG-264			
IC1002	8-749-014-38	PHOTO INTERRUPTER SG-264			
		< TRANSISTOR >			
Q1001	8-729-029-56	TRANSISTOR DTA144ESA-TP			
		< RESISTOR >			
R907	1-247-879-11	CARBON	100K	5%	1/4W
R1001	1-249-409-11	CARBON	220	5%	1/4W F
R1002	1-249-409-11	CARBON	220	5%	1/4W F
R1003	1-249-414-11	CARBON	560	5%	1/4W F
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W
R1005	1-247-818-11	CARBON	300	5%	1/4W
R1006	1-247-864-11	CARBON	24K	5%	1/4W
R1007	1-247-856-00	CARBON	11K	5%	1/4W
R1008	1-249-417-11	CARBON	1K	5%	1/4W F
		< VARIABLE RESISTOR >			
RV1001	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED/HIGH)			
RV1002	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED/NOMAL)			

LEAF SW MAIN

Ref. No.	Part No.	Description			Remarks
		< SWITCH >			
S1001	1-570-953-11	SWITCH, PUSH (1 KEY)(A PLAY)			
S1002	1-570-953-11	SWITCH, PUSH (1 KEY)(B PLAY)			
S1003	1-771-333-11	SWITCH, LEAF (A HALF)			
S1004	1-771-205-11	SWITCH, LEAF (A 120/70)			
S1005	1-771-205-11	SWITCH, LEAF (REC A)			
S1006	1-771-333-11	SWITCH, LEAF (B HALF)			
S1008	1-771-205-11	SWITCH, LEAF (B 120/70)			
S1009	1-771-205-11	SWITCH, LEAF (REC B)			
**********					
	A-4405-974-A	MAIN BOARD, COMPLETE(EA,E,JE,MY,SP,TW)			
		**********			
	A-4424-103-A	MAIN BOARD, COMPLETE(IA)			
		**********			
	A-4424-105-A	MAIN BOARD, COMPLETE(TH)			
		**********			
	7-685-646-79	SCREW+BVTP	3 × 8	TYPE2 N-S	
		< CAPACITOR >			
C101	1-162-286-31	CERAMIC	220PF	10%	50V
C103	1-162-286-31	CERAMIC	220PF	10%	50V
C104	1-164-159-11	CERAMIC	0.1uF		50V
C111	1-137-195-11	FILM	0.56uF	5%	50V
C112	1-136-158-00	FILM	0.027uF	5%	50V
C115	1-136-159-00	FILM	0.033uF	5%	50V
C116	1-130-473-00	MYLAR	0.0015uF	5%	50V
C119	1-130-479-00	MYLAR	0.0047uF	5%	50V
C120	1-130-477-00	MYLAR	0.0033uF	5%	50V
C121	1-126-964-11	ELECT	10uF	20%	50V
C122	1-162-291-31	CERAMIC	560PF	10%	50V
C123	1-136-165-00	FILM	0.1uF	5%	50V
C124	1-136-165-00	FILM	0.1uF	5%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C131	1-104-664-11	ELECT	47uF	20%	16V
C132	1-104-664-11	ELECT	47uF	20%	16V
C135	1-126-964-11	ELECT	10uF	20%	50V
C136	1-161-494-00	CERAMIC	0.022uF		25V
C141	1-126-959-11	ELECT	0.47uF	20%	50V
C151	1-162-286-31	CERAMIC	220PF	10%	50V
C153	1-162-286-31	CERAMIC	220PF	10%	50V
C161	1-137-195-11	FILM	0.56uF	5%	50V
C162	1-136-158-00	FILM	0.027uF	5%	50V
C165	1-136-159-00	FILM	0.033uF	5%	50V
C166	1-130-473-00	MYLAR	0.0015uF	5%	50V
C169	1-130-479-00	MYLAR	0.0047uF	5%	50V
C170	1-130-477-00	MYLAR	0.0033uF	5%	50V
C171	1-126-964-11	ELECT	10uF	20%	50V
C172	1-162-291-31	CERAMIC	560PF	10%	50V
C173	1-136-165-00	FILM	0.1uF	5%	50V
C174	1-136-165-00	FILM	0.1uF	5%	50V
C175	1-126-964-11	ELECT	10uF	20%	50V
C176	1-136-495-11	FILM	0.068uF	5%	50V
C177	1-136-153-00	FILM	0.01uF	5%	50V
C193	1-126-964-11	ELECT	10uF	20%	50V
C194	1-162-286-31	CERAMIC	220PF	10%	50V
C301	1-126-960-11	ELECT	1uF	20%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V

Ref. No.	Part No.	Description			Remarks
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-126-960-11	ELECT	1uF	20%	50V
C307	1-126-959-11	ELECT	0.47uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-137-194-81	FILM	0.47uF	5%	50V
C310	1-162-290-31	CERAMIC	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V
C313	1-162-294-31	CERAMIC	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-126-963-11	ELECT	4.7uF	20%	50V
C316	1-104-665-11	ELECT	100uF	20%	10V
C317	1-104-665-11	ELECT	100uF	20%	10V
C320	1-162-290-31	CERAMIC	470PF	10%	50V
C331	1-164-159-11	CERAMIC	0.1uF		50V
C332	1-164-159-11	CERAMIC	0.1uF		50V
C333	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C334	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C354	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-126-964-11	ELECT	10uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C357	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-137-194-81	FILM	0.47uF	5%	50V
C360	1-164-159-11	CERAMIC	0.1uF		50V
C360	1-164-159-21	CERAMIC	0.1uF		50V
C361	1-164-159-11	CERAMIC	0.1uF		50V
C361	1-164-159-21	CERAMIC	0.1uF		50V
C381	1-162-306-11	CERAMIC	0.01uF	30%	16V
C382	1-104-665-11	ELECT	100uF	20%	10V
C390	1-104-656-11	ELECT	2200uF	20%	6.3V
C391	1-161-494-00	CERAMIC	0.022uF	25V	
C392	1-126-916-11	ELECT	1000uF	20%	6.3V
C393	1-161-494-00	CERAMIC	0.022uF	25V	
C394	1-126-925-11	ELECT	470uF	20%	10V
C395	1-162-290-31	CERAMIC	470PF	10%	50V
C396	1-126-961-11	ELECT	2.2uF	20%	50V
C397	1-126-961-11	ELECT	2.2uF	20%	50V
C412	1-107-717-11	ELECT	47uF	20%	50V
C431	1-126-934-11	ELECT	220uF	20%	10V
C432	1-104-665-11	ELECT	100uF	20%	10V
C433	1-126-964-11	ELECT	10uF	20%	50V
C437	1-126-968-11	ELECT	100uF	20%	50V
C501	1-126-964-11	ELECT	10uF	20%	50V
C502	1-164-159-11	CERAMIC	0.1uF		50V
C503	1-136-165-00	FILM	0.1uF	5%	50V
C504	1-126-926-11	ELECT	1000uF	20%	10V
C505	1-162-306-11	CERAMIC	0.01uF	30%	16V
C508	1-109-889-11	ELECT	1uF	20%	50V
C610	1-102-953-00	CERAMIC	18PF	5%	50V
C611	1-102-953-00	CERAMIC	18PF	5%	50V
C614	1-164-159-11	CERAMIC	0.1uF		50V
C616	1-104-665-11	ELECT	100uF	20%	10V
C662	1-164-159-11	CERAMIC	0.1uF		50V
C664	1-104-665-11	ELECT	100uF	20%	10V
C698	1-164-159-11	CERAMIC	0.1uF		50V
C699	1-104-665-11	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remarks
C801	1-126-963-11	ELECT	4.7uF	20%	50V
C802	1-162-290-31	CERAMIC	470PF	10%	50V
C803	1-162-282-31	CERAMIC	100PF	10%	50V
C804	1-104-665-11	ELECT	100uF	20%	10V
C807	1-136-495-11	FILM	0.068uF	5%	50V
C808	1-136-495-11	FILM	0.068uF	5%	50V
C809	1-128-552-51	ELECT	47uF	20%	63V
C810	1-128-578-11	ELECT	1uF	20%	100V
C811	1-162-306-11	CERAMIC	0.01uF	30%	16V
C812	1-162-306-11	CERAMIC	0.01uF	30%	16V
C841	1-127-751-11	ELECT	3300uF	20%	50V
C842	1-127-752-11	ELECT	3300uF	20%	63V
C843	1-136-165-00	FILM	0.1uF	5%	50V
C844	1-130-777-00	FILM	0.1uF	10%	100V
C851	1-126-963-11	ELECT	4.7uF	20%	50V
C852	1-162-290-31	CERAMIC	470PF	10%	50V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-104-665-11	ELECT	100uF	20%	10V
C857	1-136-495-11	FILM	0.068uF	5%	50V
C858	1-136-495-11	FILM	0.068uF	5%	50V
C859	1-128-552-51	ELECT	47uF	20%	63V
C865	1-126-947-11	ELECT	47uF	20%	35V
C870	1-164-159-11	CERAMIC	0.1uF		50V
C871	1-126-948-11	ELECT	100uF	20%	35V
C872	1-128-553-11	ELECT	220uF	20%	63V
C891	1-127-751-11	ELECT	3300uF	20%	50V
C892	1-127-752-11	ELECT	3300uF	20%	63V
C893	1-136-165-00	FILM	0.1uF	5%	50V
C894	1-130-777-00	FILM	0.1uF	10%	100V
C901	1-136-165-00	FILM	0.1uF	5%	50V
C902	1-126-939-11	ELECT	10000uF	20%	16V
C903	1-104-666-11	ELECT	220uF	20%	25V
C904	1-104-664-11	ELECT	47uF	20%	16V
C905	1-104-661-91	ELECT	330uF	20%	16V
C906	1-136-165-00	FILM	0.1uF	5%	50V
C907	1-128-548-11	ELECT	4700uF	20%	25V
C909	1-126-964-11	ELECT	10uF	20%	50V
C910	1-104-665-11	ELECT	100uF	20%	10V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-126-767-11	ELECT	1000uF	20%	16V
C913	1-126-964-11	ELECT	10uF	20%	50V
C914	1-126-767-11	ELECT	1000uF	20%	16V
C915	1-104-664-11	ELECT	47uF	20%	16V
C916	1-164-159-11	CERAMIC	0.1uF		50V
C917	1-126-933-11	ELECT	100uF	20%	16V
C922	1-126-964-11	ELECT	10uF	20%	50V
C923	1-126-916-11	ELECT	1000uF	20%	6.3V (EA,E,JE,MY,SP,TW)
C951	1-136-165-00	FILM	0.1uF	5%	50V
C952	1-126-943-11	ELECT	2200uF	20%	25V
C953	1-104-666-11	ELECT	220uF	20%	25V
C955	1-104-661-91	ELECT	330uF	20%	16V
C956	1-136-165-00	FILM	0.1uF	5%	50V
C1201	1-162-199-31	CERAMIC	10PF	5%	50V
C1202	1-162-215-31	CERAMIC	47PF	5%	50V
C1203	1-162-282-31	CERAMIC	100PF	10%	50V
C1204	1-162-283-31	CERAMIC	120PF	10%	50V
C1205	1-162-280-31	CERAMIC	82PF	10%	50V
C1206	1-136-165-00	FILM	0.1uF	5%	50V
C1207	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1208	1-126-934-11	ELECT	220uF	20%	10V

Ref. No.	Part No.	Description			Remarks
C1209	1-136-165-00	FILM	0.1uF	5%	50V
C1210	1-126-964-11	ELECT	10uF	20%	50V
C1211	1-126-964-11	ELECT	10uF	20%	50V
C1212	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1213	1-126-934-11	ELECT	220uF	20%	10V
C1215	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C1217	1-126-961-11	ELECT	2.2uF	20%	50V
C1218	1-126-934-11	ELECT	220uF	20%	10V
C1219	1-126-964-11	ELECT	10uF	20%	50V
C1220	1-126-964-11	ELECT	10uF	20%	50V
C1221	1-162-215-31	CERAMIC	47PF	5%	50V

< CONNECTOR >

*	CN301	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P
	CN303	1-784-776-11	CONNECTOR, FFC 15P
	CN304	1-784-778-11	CONNECTOR, FFC 17P
	CN371	1-784-776-11	CONNECTOR, FFC 15P
	CN391	1-568-856-11	SOCKET, CONNECTOR 13P
*	CN392	1-568-935-11	PIN, CONNECTOR 8P
*	CN393	1-568-936-11	PIN, CONNECTOR 9P
	CN501	1-784-780-11	CONNECTOR, FFC 19P

< DIODE >

D141	8-719-911-19	DIODE	1SS133T-72
D191	8-719-911-19	DIODE	1SS133T-72
D331	8-719-911-19	DIODE	1SS133T-72
D333	8-719-911-19	DIODE	1SS133T-72
D334	8-719-911-19	DIODE	1SS133T-72
D335	8-719-911-19	DIODE	1SS133T-72
D401	8-719-911-19	DIODE	1SS133T-72
D411	8-719-911-19	DIODE	1SS133T-72
D501	8-719-911-19	DIODE	1SS133T-72
D502	8-719-911-19	DIODE	1SS133T-72
D503	8-719-911-19	DIODE	1SS133T-72
D504	8-719-911-19	DIODE	1SS133T-72
D505	8-719-911-19	DIODE	1SS133T-72
D506	8-719-911-19	DIODE	1SS133T-72
D507	8-719-911-19	DIODE	1SS133T-72
D509	8-719-911-19	DIODE	1SS133T-72
D607	8-719-911-19	DIODE	1SS133T-72
D801	8-719-911-19	DIODE	1SS133T-72
D802	8-719-118-86	DIODE	RD11F-T7B3
D803	8-719-911-19	DIODE	1SS133T-72
D831	8-719-302-38	DIODE	RBV-602-01
D832	8-719-302-38	DIODE	RBV-602-01
D851	8-719-911-19	DIODE	1SS133T-72
D852	8-719-118-86	DIODE	RD11F-T7B3
D865	8-719-911-19	DIODE	1SS133T-72
D870	8-719-934-25	DIODE	HZS33-1LTA
D872	8-719-921-48	DIODE	MTZJ-T-72-5.6C
D874	8-719-024-99	DIODE	11ES2-NTA2B
D901	8-719-975-85	DIODE	21DQ04N-TA2
D902	8-719-975-85	DIODE	21DQ04N-TA2
D903	8-719-975-85	DIODE	21DQ04N-TA2
D904	8-719-975-85	DIODE	21DQ04N-TA2
D905	8-719-933-36	DIODE	HZS6B1LTA
D906	8-719-911-19	DIODE	1SS133T-72
D907	8-719-024-99	DIODE	11ES2-NTA2B

MAIN

Ref. No.	Part No.	Description	Remarks
D908	8-719-024-99	DIODE 11ES2-NTA2B	
D909	8-719-024-99	DIODE 11ES2-NTA2B	
D910	8-719-024-99	DIODE 11ES2-NTA2B	
D911	8-719-911-19	DIODE 1SS133T-72	
D912	8-719-024-99	DIODE 11ES2-NTA2B	
D915	8-719-935-69	DIODE HZS11B1LTA	
D918	8-719-024-99	DIODE 11ES2-NTA2B	
		< EARTH >	
* EPT3	1-537-738-21	TERMINAL, EARTH	
		< IC >	
IC101	8-759-571-55	IC M62493FP-A	
IC301	8-759-495-26	IC HA12215F	
IC381	8-749-923-04	IC TOTX178A(CD DIGITAL OUT)	
IC501	8-759-588-91	IC M30622MA-A09FP	
IC502	8-759-635-63	IC M51943BSL-TP	
IC801	8-749-015-34	IC STK411-210E	
IC901	8-759-604-86	IC M5F7807L	
IC902	8-759-231-53	IC M5F7805L	
IC903	8-759-088-08	IC uPC7812AHF	
IC904	8-759-231-53	IC M5F7805L	
IC1201	8-759-579-61	IC LV1150	
		< JACK >	
J101	1-573-028-31	JACK, PIN 4P(MD/VIDEO)	
J191	1-774-785-11	JACK, PIN 1P(SUPER WOOFER)	
		< COIL >	
L381	1-410-521-11	INDUCTOR 100uH	
L391	1-410-521-11	INDUCTOR 100uH	
L392	1-410-521-11	INDUCTOR 100uH	
L501	1-410-509-11	INDUCTOR 10uH	
L1201	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q111	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q112	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q113	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q161	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q162	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q163	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q191	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q192	8-729-900-63	TRANSISTOR BN1F4M-TP	
Q331	8-729-116-56	TRANSISTOR 2SB1068TP-L	
Q332	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q333	8-729-116-56	TRANSISTOR 2SB1068TP-L	
Q334	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q335	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q336	8-729-116-56	TRANSISTOR 2SB1068TP-L	
Q337	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q338	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q339	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q340	8-729-116-56	TRANSISTOR 2SB1068TP-L	
Q341	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q342	8-729-422-57	TRANSISTOR BN1A4M-TP	

Ref. No.	Part No.	Description	Remarks
Q343	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q411	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q412	8-729-900-63	TRANSISTOR BN1F4M-TP	
Q431	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q432	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q433	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q434	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q435	8-729-900-36	TRANSISTOR BA1F4M-TP	
Q436	8-729-119-77	TRANSISTOR 2SA1175TP-FEK	
Q437	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q439	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q461	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q501	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q508	8-729-900-63	TRANSISTOR BN1F4M-TP	
Q509	8-729-900-63	TRANSISTOR BN1F4M-TP	
Q801	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q803	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q804	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q851	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q865	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q870	8-729-140-97	TRANSISTOR 2SB734-T-34	
Q901	8-729-209-15	TRANSISTOR 2SD2012	
Q902	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q903	8-729-900-36	TRANSISTOR BA1F4M-TP	
Q904	8-729-900-36	TRANSISTOR BA1F4M-TP	
Q905	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q909	8-729-026-68	TRANSISTOR 2SD2525(TP)	
Q911	8-729-141-83	TRANSISTOR 2SB1375	
Q912	8-729-900-36	TRANSISTOR BA1F4M-TP(EA,E,JE,MY,SP,TW)	
Q913	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q914	8-729-119-77	TRANSISTOR 2SA1175TP-FEK	
Q923	8-729-900-36	TRANSISTOR BA1F4M-TP	
Q951	8-729-141-83	TRANSISTOR 2SB1375	
Q952	8-729-119-77	TRANSISTOR 2SA1175TP-FEK	
		< RESISTOR >	
R101	1-249-417-11	CARBON 1K 5% 1/4W	F
R103	1-249-417-11	CARBON 1K 5% 1/4W	F
R111	1-249-429-11	CARBON 10K 5% 1/4W	
R112	1-247-903-00	CARBON 1M 5% 1/4W	
R113	1-247-903-00	CARBON 1M 5% 1/4W	
R114	1-249-419-11	CARBON 1.5K 5% 1/4W	F
R115	1-249-433-11	CARBON 22K 5% 1/4W	
R116	1-247-887-00	CARBON 220K 5% 1/4W	
R117	1-249-429-11	CARBON 10K 5% 1/4W	
R118	1-249-437-11	CARBON 47K 5% 1/4W	
R119	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R120	1-249-441-11	CARBON 100K 5% 1/4W	
R121	1-249-429-11	CARBON 10K 5% 1/4W	
R124	1-249-433-11	CARBON 22K 5% 1/4W	F
R125	1-247-843-11	CARBON 3.3K 5% 1/4W	
R126	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R130	1-249-433-11	CARBON 22K 5% 1/4W (EXCEPT IA)	
R131	1-247-807-31	CARBON 100 5% 1/4W	
R132	1-247-807-31	CARBON 100 5% 1/4W	
R133	1-247-807-31	CARBON 100 5% 1/4W	
R141	1-249-433-11	CARBON 22K 5% 1/4W	
R142	1-249-433-11	CARBON 22K 5% 1/4W	
R143	1-249-417-11	CARBON 1K 5% 1/4W	F
R144	1-249-441-11	CARBON 100K 5% 1/4W	
R145	1-247-903-00	CARBON 1M 5% 1/4W	

Ref. No.	Part No.	Description			Remarks
R151	1-249-417-11	CARBON	1K	5%	1/4W F
R153	1-249-417-11	CARBON	1K	5%	1/4W F
R161	1-249-429-11	CARBON	10K	5%	1/4W
R162	1-247-903-00	CARBON	1M	5%	1/4W
R163	1-247-903-00	CARBON	1M	5%	1/4W
R164	1-249-419-11	CARBON	1.5K	5%	1/4W F
R165	1-249-433-11	CARBON	22K	5%	1/4W
R166	1-247-887-00	CARBON	220K	5%	1/4W
R167	1-249-429-11	CARBON	10K	5%	1/4W
R168	1-249-437-11	CARBON	47K	5%	1/4W
R169	1-249-421-11	CARBON	2.2K	5%	1/4W F
R170	1-249-441-11	CARBON	100K	5%	1/4W
R171	1-249-429-11	CARBON	10K	5%	1/4W
R178	1-249-421-11	CARBON	2.2K	5%	1/4W F
R190	1-249-441-11	CARBON	100K	5%	1/4W
R196	1-249-417-11	CARBON	1K	5%	1/4W F
R197	1-249-441-11	CARBON	100K	5%	1/4W
R198	1-249-417-11	CARBON	1K	5%	1/4W F
R199	1-249-429-11	CARBON	10K	5%	1/4W
R301	1-249-435-11	CARBON	33K	5%	1/4W
R302	1-249-421-11	CARBON	2.2K	5%	1/4W F
R303	1-247-807-31	CARBON	100	5%	1/4W
R304	1-247-807-31	CARBON	100	5%	1/4W
R305	1-249-421-11	CARBON	2.2K	5%	1/4W F
R306	1-249-428-11	CARBON	8.2K	5%	1/4W F
R307	1-249-428-11	CARBON	8.2K	5%	1/4W F
R308	1-249-425-11	CARBON	4.7K	5%	1/4W F
R309	1-249-433-11	CARBON	22K	5%	1/4W
R311	1-247-903-00	CARBON	1M	5%	1/4W
R312	1-247-884-11	CARBON	160K	5%	1/4W
R313	1-249-441-11	CARBON	100K	5%	1/4W
R315	1-249-429-11	CARBON	10K	5%	1/4W
R316	1-249-432-11	CARBON	18K	5%	1/4W
R317	1-249-429-11	CARBON	10K	5%	1/4W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-247-893-11	CARBON	390K	5%	1/4W
R321	1-249-422-11	CARBON	2.7K	5%	1/4W F
R322	1-249-428-11	CARBON	8.2K	5%	1/4W F
R324	1-247-876-11	CARBON	75K	5%	1/4W
R325	1-247-876-11	CARBON	75K	5%	1/4W
R326	1-249-437-11	CARBON	47K	5%	1/4W
R327	1-249-437-11	CARBON	47K	5%	1/4W
R328	1-249-437-11	CARBON	47K	5%	1/4W
R329	1-249-417-11	CARBON	1K	5%	1/4W F
R330	1-249-425-11	CARBON	4.7K	5%	1/4W F
R331	1-249-425-11	CARBON	4.7K	5%	1/4W F
R332	1-249-415-11	CARBON	680	5%	1/4W F
R333	1-249-421-11	CARBON	2.2K	5%	1/4W F
R334	1-249-415-11	CARBON	680	5%	1/4W F
R335	1-249-421-11	CARBON	2.2K	5%	1/4W F
R336	1-249-437-11	CARBON	47K	5%	1/4W
R337	1-249-417-11	CARBON	1K	5%	1/4W F
R338	1-249-411-11	CARBON	330	5%	1/4W
R339	1-249-437-11	CARBON	47K	5%	1/4W
R340	1-249-437-11	CARBON	47K	5%	1/4W
R341	1-249-411-11	CARBON	330	5%	1/4W
R342	1-249-437-11	CARBON	47K	5%	1/4W
R343	1-249-417-11	CARBON	1K	5%	1/4W F
R351	1-249-435-11	CARBON	33K	5%	1/4W
R352	1-249-421-11	CARBON	2.2K	5%	1/4W F
R353	1-247-807-31	CARBON	100	5%	1/4W
R354	1-247-807-31	CARBON	100	5%	1/4W
R355	1-249-421-11	CARBON	2.2K	5%	1/4W F
R356	1-249-428-11	CARBON	8.2K	5%	1/4W F
R357	1-249-428-11	CARBON	8.2K	5%	1/4W F
R358	1-249-425-11	CARBON	4.7K	5%	1/4W F
R359	1-249-435-11	CARBON	33K	5%	1/4W
R391	1-249-422-11	CARBON	2.7k	5%	1/4W
R392	1-249-422-11	CARBON	2.7k	5%	1/4W
R393	1-247-761-11	CARBON	5.6K	5%	1/4W
R394	1-247-761-11	CARBON	5.6K	5%	1/4W
R411	1-215-893-11	METAL OXIDE	1.5K	5%	2W F
R413	1-249-402-11	CARBON	56	5%	1/4W F
R414	1-249-417-11	CARBON	1K	5%	1/4W F
R415	1-249-429-11	CARBON	10K	5%	1/4W
R416	1-249-437-11	CARBON	47K	5%	1/4W
R417	1-249-417-11	CARBON	1K	5%	1/4W F
R421	1-260-091-11	CARBON	220	5%	1/2W (IA)
R421	1-260-093-11	CARBON	330	5%	1/2W (EXCEPT IA)
R422	1-260-091-11	CARBON	220	5%	1/2W (IA)
R422	1-260-093-11	CARBON	330	5%	1/2W (EXCEPT IA)
R423	1-260-091-11	CARBON	220	5%	1/2W (IA)
R431	1-249-438-11	CARBON	56K	5%	1/4W
R432	1-249-437-11	CARBON	47K	5%	1/4W
R434	1-249-433-11	CARBON	22K	5%	1/4W
R435	1-249-425-11	CARBON	4.7K	5%	1/4W F
R437	1-249-429-11	CARBON	10K	5%	1/4W
R438	1-249-429-11	CARBON	10K	5%	1/4W
R439	1-249-425-11	CARBON	4.7K	5%	1/4W F
R440	1-249-433-11	CARBON	22K	5%	1/4W
R441	1-249-435-11	CARBON	33K	5%	1/4W
R443	1-249-417-11	CARBON	1K	5%	1/4W F
R463	1-249-402-11	CARBON	56	5%	1/4W F
R464	1-249-417-11	CARBON	1K	5%	1/4W F
R471	1-260-091-11	CARBON	220	5%	1/2W (IA)
R471	1-260-093-11	CARBON	330	5%	1/2W (EXCEPT IA)
R472	1-260-091-11	CARBON	220	5%	1/2W (IA)
R472	1-260-093-11	CARBON	330	5%	1/2W (EXCEPT IA)
R473	1-260-091-11	CARBON	220	5%	1/2W (IA)
R501	1-249-413-11	CARBON	470	5%	1/4W F
R502	1-249-425-11	CARBON	4.7K	5%	1/4W F
R503	1-249-437-11	CARBON	47K	5%	1/4W
R504	1-249-437-11	CARBON	47K	5%	1/4W
R505	1-249-429-11	CARBON	10K	5%	1/4W
R506	1-249-429-11	CARBON	10K	5%	1/4W
R508	1-249-421-11	CARBON	2.2K	5%	1/4W F
R509	1-249-441-11	CARBON	100K	5%	1/4W
R511	1-247-807-31	CARBON	100	5%	1/4W
R512	1-247-807-31	CARBON	100	5%	1/4W
R523	1-249-437-11	CARBON	47K	5%	1/4W

MAIN

Ref. No.	Part No.	Description			Remarks
R524	1-249-419-11	CARBON	1.5K	5%	1/4W F (EXCEPT TH)
R524	1-249-427-11	CARBON	6.8K	5%	1/4W F (TH)
R527	1-249-429-11	CARBON	10K	5%	1/4W
R536	1-249-429-11	CARBON	10K	5%	1/4W
R567	1-247-807-31	CARBON	100	5%	1/4W
R568	1-249-429-11	CARBON	10K	5%	1/4W
R569	1-249-429-11	CARBON	10K	5%	1/4W
R570	1-249-429-11	CARBON	10K	5%	1/4W
R571	1-249-429-11	CARBON	10K	5%	1/4W
R577	1-249-429-11	CARBON	10K	5%	1/4W
R581	1-249-429-11	CARBON	10K	5%	1/4W
R582	1-247-843-11	CARBON	3.3K	5%	1/4W
R613	1-247-807-31	CARBON	100	5%	1/4W
R617	1-249-429-11	CARBON	10K	5%	1/4W
R618	1-249-425-11	CARBON	4.7K	5%	1/4W F
R627	1-247-807-31	CARBON	100	5%	1/4W
R629	1-247-807-31	CARBON	100	5%	1/4W
R630	1-247-807-31	CARBON	100	5%	1/4W
R636	1-247-807-31	CARBON	100	5%	1/4W
R640	1-247-807-31	CARBON	100	5%	1/4W
R641	1-247-807-31	CARBON	100	5%	1/4W
R642	1-247-807-31	CARBON	100	5%	1/4W
R643	1-247-807-31	CARBON	100	5%	1/4W
R649	1-247-807-31	CARBON	100	5%	1/4W
R650	1-247-807-31	CARBON	100	5%	1/4W
R651	1-247-807-31	CARBON	100	5%	1/4W
R652	1-247-807-31	CARBON	100	5%	1/4W
R653	1-247-807-31	CARBON	100	5%	1/4W
R654	1-247-807-31	CARBON	100	5%	1/4W
R655	1-247-807-31	CARBON	100	5%	1/4W
R659	1-247-807-31	CARBON	100	5%	1/4W
R660	1-247-807-31	CARBON	100	5%	1/4W
R661	1-247-807-31	CARBON	100	5%	1/4W
R663	1-247-807-31	CARBON	100	5%	1/4W
R665	1-247-807-31	CARBON	100	5%	1/4W
R666	1-247-807-31	CARBON	100	5%	1/4W
R667	1-247-807-31	CARBON	100	5%	1/4W
R668	1-247-807-31	CARBON	100	5%	1/4W
R669	1-247-807-31	CARBON	100	5%	1/4W
R670	1-247-807-31	CARBON	100	5%	1/4W
R671	1-247-807-31	CARBON	100	5%	1/4W
R686	1-247-807-31	CARBON	100	5%	1/4W
R687	1-247-807-31	CARBON	100	5%	1/4W
R688	1-247-807-31	CARBON	100	5%	1/4W
R689	1-247-807-31	CARBON	100	5%	1/4W
R690	1-247-807-31	CARBON	100	5%	1/4W
R691	1-247-807-31	CARBON	100	5%	1/4W
R801	1-249-417-11	CARBON	1K	5%	1/4W F
R802	1-249-438-11	CARBON	56K	5%	1/4W
R803	1-249-413-11	CARBON	470	5%	1/4W F
R804	1-249-438-11	CARBON	56K	5%	1/4W
R805	1-249-417-11	CARBON	1K	5%	1/4W F
R806	1-249-431-11	CARBON	15K	5%	1/4W
R807	1-249-441-11	CARBON	100K	5%	1/4W
R808	1-220-893-11	METAL	0.22	10%	5W
R809	1-260-076-11	CARBON	10	5%	1/2W
R810	1-260-101-11	CARBON	1.5K	5%	1/2W
R811	1-212-881-11	FUSIBLE	100	5%	1/4W F
R812	1-202-972-61	FUSIBLE	1	5%	1/4W F
R813	1-249-435-11	CARBON	33K	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R814	1-249-421-11	CARBON	2.2K	5%	1/4W F
R815	1-249-433-11	CARBON	22K	5%	1/4W (EA,E,JE,MY,SP,TW)
R816	1-249-429-11	CARBON	10K	5%	1/4W
R817	1-249-421-11	CARBON	2.2K	5%	1/4W F
R818	1-249-435-11	CARBON	33K	5%	1/4W
R819	1-249-439-11	CARBON	68K	5%	1/4W
R833	1-247-843-11	CARBON	3.3K	5%	1/4W
R842	1-249-437-11	CARBON	47K	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W F
R852	1-249-438-11	CARBON	56K	5%	1/4W
R853	1-249-413-11	CARBON	470	5%	1/4W F
R854	1-249-438-11	CARBON	56K	5%	1/4W
R855	1-249-417-11	CARBON	1K	5%	1/4W F
R856	1-249-431-11	CARBON	15K	5%	1/4W
R857	1-249-441-11	CARBON	100K	5%	1/4W
R858	1-220-893-11	METAL	0.22	10%	5W
R859	1-260-076-11	CARBON	10	5%	1/2W
R860	1-260-101-11	CARBON	1.5K	5%	1/2W
R861	1-212-881-11	FUSIBLE	100	5%	1/4W F
R865	1-249-435-11	CARBON	33K	5%	1/4W
R866	1-249-435-11	CARBON	33K	5%	1/4W
R870	1-219-121-11	FUSIBLE	0.22	5%	1/4W F (TH,IA)
R871	1-249-429-11	CARBON	10K	5%	1/4W
R872	1-247-843-11	CARBON	3.3K	5%	1/4W
R873	1-219-121-11	FUSIBLE	0.22	5%	1/4W F (EA,E,JE,MY,SP,TW)
R892	1-249-437-11	CARBON	47K	5%	1/4W
R901	1-247-843-11	CARBON	3.3K	5%	1/4W
R902	1-249-415-11	CARBON	680	5%	1/4W F
R903	1-249-419-11	CARBON	1.5K	5%	1/4W F
R904	1-249-414-11	CARBON	560	5%	1/4W F
R905	1-249-425-11	CARBON	4.7K	5%	1/4W F
R906	1-247-843-11	CARBON	3.3K	5%	1/4W
R907	1-249-415-11	CARBON	680	5%	1/4W F
R908	1-249-429-11	CARBON	10K	5%	1/4W
R909	1-249-430-11	CARBON	12K	5%	1/4W
R911	1-249-409-11	CARBON	220	5%	1/4W F (EA,E,JE,MY,SP,TW)
R916	1-249-421-11	CARBON	2.2K	5%	1/4W F (EA,E,JE,MY,SP,TW)
R917	1-249-409-11	CARBON	220	5%	1/4W F (EA,E,JE,MY,SP,TW)
R920	1-249-383-11	CARBON	1.5	5%	1/6W F
R921	1-249-383-11	CARBON	1.5	5%	1/6W F
R931	1-249-429-11	CARBON	10K	5%	1/4W
R1201	1-247-807-31	CARBON	100	5%	1/4W
R1203	1-249-441-11	CARBON	100K	5%	1/4W
R1204	1-249-441-11	CARBON	100K	5%	1/4W
R1205	1-249-417-11	CARBON	1K	5%	1/4W F
R1206	1-249-441-11	CARBON	100K	5%	1/4W
R1207	1-249-441-11	CARBON	100K	5%	1/4W
R1214	1-136-167-00	FILM	0.15MF	5%	50V
R1216	1-136-167-00	FILM	0.15MF	5%	50V

< VARIABLE RESISTOR >

RV301	1-241-764-11	RES, ADJ, CARBON 10K			
RV351	1-241-764-11	RES, ADJ, CARBON 10K			

Ref. No.	Part No.	Description			Remarks
		< RELAY >			
RY401	1-515-920-11	RELAY (24V)			
		< TERMINAL >			
TM401	1-537-240-31	TERMINAL BOARD (CHECKER PIN)(SPEAKER)			
		< VIBRATOR >			
X601	1-567-098-41	VIBRATOR, CRYSTAL 32.768kHz			
X613	1-781-107-21	VIBRATOR, SERAMIC 16.0MHz			
**********					
*	1-658-578-11	MOTOR(SLIDE) BOARD			
		**********			
		< CAPACITOR >			
C801	1-162-306-11	CERAMIC	0.01uF	30%	16V
C805	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN801	1-568-947-11	PIN, CONNECTOR 9P			
		< DIODE >			
D801	8-719-921-48	DIODE MTZJ-T-72-5.6C		(EXCEPT IA)	
D804	8-719-911-19	DIODE 1N4148M-TP			
D805	8-719-911-19	DIODE 1N4148M-TP			
		< IC >			
IC801	8-759-274-09	IC BA6286N			
		< RESISTOR >			
R801	1-249-401-11	CARBON	47	5%	1/4W F
		< SWITCH >			
S801	1-762-527-11	SWITCH, ROTARY			
**********					
*	1-658-577-11	MOTOR(TURN) BOARD			
		**********			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	30%	16V
C702	1-126-964-11	ELECT	10uF	20%	50V
C705	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN703	1-750-413-11	CONNECTOR, FFC/FPC 8P			
CN703	1-785-550-11	CONNECTOR, FFC/FPC 8P			
CN704	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D701	8-719-983-66	DIODE MTZJ-T-72-3.6B (EXCEPT IA)			
		< IC >			
IC701	8-759-633-65	IC M54641L			
		< RESISTOR >			
R706	1-249-411-11	CARBON	330	5%	1/4W
R707	1-249-401-11	CARBON	47	5%	1/4W F
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Ref. No.	Part No.	Description			Remarks
	A-4419-652-A	PANEL BOARD, COMPLETE (EA,E,JE,MY,SP,TW)			
		**********			
	A-4426-187-A	PANEL BOARD, COMPLETE (IA)			
		**********			
	A-4426-195-A	PANEL BOARD, COMPLETE (TH)			
		**********			
*	4-949-935-21	CUSHION (FL)			
*	4-996-796-01	HOLDER, FL TUBE			
		< CAPACITOR >			
C601	1-162-306-11	CERAMIC	0.01uF	30%	16V
C603	1-162-306-11	CERAMIC	0.01uF	30%	16V
C604	1-126-163-11	ELECT	4.7uF	20%	50V
C606	1-126-160-11	ELECT	1uF	20%	50V
C625	1-162-294-31	CERAMIC	0.001uF	10%	50V
C626	1-124-589-11	ELECT	47uF	20%	16V
C627	1-162-306-11	CERAMIC	0.01uF	30%	16V
C628	1-162-306-11	CERAMIC	0.01uF	30%	16V
C629	1-162-306-11	CERAMIC	0.01uF	30%	16V
C630	1-162-306-11	CERAMIC	0.01uF	30%	16V
C631	1-126-157-11	ELECT	10uF	20%	16V
C632	1-126-157-11	ELECT	10uF	20%	16V
C633	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C634	1-126-157-11	ELECT	10uF	20%	16V
C635	1-126-163-11	ELECT	4.7uF	20%	50V
C640	1-124-589-11	ELECT	47uF	20%	16V
C644	1-162-306-11	CERAMIC	0.01uF	30%	16V
C645	1-162-306-11	CERAMIC	0.01uF	30%	16V
C646	1-162-306-11	CERAMIC	0.01uF	30%	16V
C647	1-162-306-11	CERAMIC	0.01uF	30%	16V
C648	1-162-306-11	CERAMIC	0.01uF	30%	16V
C649	1-124-589-11	ELECT	47uF	20%	16V
C703	1-164-159-11	CERAMIC	0.1uF		50V
C711	1-162-294-31	CERAMIC	0.001uF	10%	50V
C712	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C713	1-126-160-11	ELECT	1uF	20%	50V
C714	1-136-495-11	FILM	0.068uF	5%	50V
C715	1-124-465-00	ELECT	0.47uF	20%	50V
C716	1-124-465-00	ELECT	0.47uF	20%	50V
C717	1-136-167-00	FILM	0.15uF	5%	50V
C718	1-162-294-31	CERAMIC	0.001uF	10%	50V
C719	1-126-160-11	ELECT	1uF	20%	50V
C720	1-161-494-00	CERAMIC	0.022uF	25V	
C721	1-162-305-11	CERAMIC	0.0068uF	20%	16V
C722	1-136-495-11	FILM	0.068uF	5%	50V
C723	1-126-153-11	ELECT	22uF	20%	6.3V
C724	1-164-159-11	CERAMIC	0.1uF		50V
C725	1-126-153-11	ELECT	22uF	20%	6.3V
C731	1-162-306-11	CERAMIC	0.01uF	30%	16V
C732	1-124-257-00	ELECT	2.2uF	20%	50V
C733	1-162-294-31	CERAMIC	0.001uF	10%	50V
C734	1-162-215-31	CERAMIC	47PF	5%	50V
C735	1-124-261-00	ELECT	10uF	20%	50V
C736	1-162-290-31	CERAMIC	470PF	10%	50V
C737	1-124-463-00	ELECT	0.1uF	20%	50V
C738	1-124-257-00	ELECT	2.2uF	20%	50V
C739	1-162-215-31	CERAMIC	47PF	5%	50V
C741	1-124-261-00	ELECT	10uF	20%	50V
C742	1-162-282-31	CERAMIC	100PF	10%	50V
C743	1-124-257-00	ELECT	2.2uF	20%	50V

PANEL

Ref. No.	Part No.	Description			Remarks
C744	1-162-306-11	CERAMIC	0.01uF	30%	16V
C745	1-124-257-00	ELECT	2.2uF	20%	50V
C747	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN22	1-506-481-11	PIN, CONNECTOR 2P			
CN601	1-784-461-11	CONNECTOR, FFC/FPC 19P			
		< DIODE >			
D611	8-719-063-93	DIODE SLR325VC-N-T32(JOG DIAL)			
D612	8-719-057-97	DIODE SEL5923A-TP15(GROOVE)			
D613	8-719-063-93	DIODE SLR325VC-N-T32(CD NON-STOP)			
D614	8-719-057-97	DIODE SEL5923A-TP15(PBC OFF)			
D615	8-719-063-93	DIODE SLR325VC-N-T32(ENTER/NEXT)			
D616	8-719-057-97	DIODE SEL5923A-TP15(+▶▶)			
D617	8-719-057-97	DIODE SEL5923A-TP15(-▶▶)			
D618	8-719-057-97	DIODE SEL5923A-TP15(VIDE0/CD)			
D619	8-719-057-97	DIODE SEL5923A-TP15(PBC)			
D620	8-719-056-13	DIODE SML79423C-TP15(CD▶II)			
D621	8-719-058-03	DIODE SEL5423E-TP15(TAPE B▶)			
D622	8-719-058-03	DIODE SEL5423E-TP15(TAPE B◀)			
D623	8-719-058-03	DIODE SEL5423E-TP15(TAPE A▶)			
D624	8-719-058-03	DIODE SEL5423E-TP15(TAPE A◀)			
D625	8-719-073-47	DIODE SML72923C-TP15(REC PAUSE/START)			
D626	8-719-063-93	DIODE SLR325VC-N-T32(TIMER SELECT)			
D632	8-719-050-84	DIODE RB441Q-40T-72			
D634	8-719-911-19	DIODE 1SS133T-72			
D635	8-719-911-19	DIODE 1SS133T-72			
D636	8-719-991-33	DIODE 1SS133T-77			
D636	8-719-911-19	DIODE 1SS133T-72			
D702	8-719-024-99	DIODE 11ES2-NTA2B			
D703	8-719-024-99	DIODE 11ES2-NTA2B			
D704	8-719-024-99	DIODE 11ES2-NTA2B			
		< EARTH >			
* EH601	1-537-738-21	TERMINAL, EARTH			
		< FERRITE BEAD >			
FB602	1-410-397-21	FERRITE BEAD INDUCTOR			
		< FILTER >			
FL601	1-517-731-21	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC601	8-759-578-51	IC TMP88CP76F-6001			
IC602	8-749-011-05	IC GP1U28X			
IC603	8-759-495-25	IC BA3833F-E2			
IC711	8-759-496-41	IC M65850FP-E1			
IC712	8-759-636-55	IC M5218AFP			
		< JACK >			
J701	1-785-569-11	JACK (SMALL TYPE)(PHONE)			
J711	1-785-569-11	JACK (SMALL TYPE)(MIC2)			
J712	1-785-569-11	JACK (SMALL TYPE)(MIC1)			
		< COIL >			
L751	1-410-521-11	INDUCTOR 100uH			

Ref. No.	Part No.	Description			Remarks
		< TRANSISTOR >			
Q601	8-729-118-00	TRANSISTOR 2SB1116-TP-LK			
Q602	8-729-118-00	TRANSISTOR 2SB1116-TP-LK			
Q603	8-729-119-78	TRANSISTOR 2SC2785TP-HFE			
Q604	8-729-119-77	TRANSISTOR 2SA1175TP-FEK			
Q605	8-729-119-77	TRANSISTOR 2SA1175TP-FEK			
Q611	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q612	8-729-119-77	TRANSISTOR 2SA1175TP-FEK			
Q613	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q614	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q615	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q616	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q617	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q618	8-729-900-80	TRANSISTOR BA1A4M-TP			
Q620	8-729-904-39	TRANSISTOR BA1A4Z-TP			
Q621	8-729-904-39	TRANSISTOR BA1A4Z-TP			
		< RESISTOR >			
R601	1-247-903-00	CARBON	1M	5%	1/4W
R602	1-247-807-31	CARBON	100	5%	1/4W
R603	1-247-807-31	CARBON	100	5%	1/4W
R604	1-247-807-31	CARBON	100	5%	1/4W
R605	1-249-401-11	CARBON	47	5%	1/4W F
R606	1-249-441-11	CARBON	100K	5%	1/4W
R607	1-249-441-11	CARBON	100K	5%	1/4W
R610	1-249-401-11	CARBON	47	5%	1/4W F
R611	1-249-437-11	CARBON	47K	5%	1/4W
R612	1-249-437-11	CARBON	47K	5%	1/4W
R613	1-249-441-11	CARBON	100K	5%	1/4W
R614	1-249-437-11	CARBON	47K	5%	1/4W
R616	1-249-435-11	CARBON	33K	5%	1/4W
R617	1-247-895-00	CARBON	470K	5%	1/4W
R618	1-249-429-11	CARBON	10K	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-249-429-11	CARBON	10K	5%	1/4W
R628	1-249-429-11	CARBON	10K	5%	1/4W
R629	1-249-429-11	CARBON	10K	5%	1/4W
R630	1-249-429-11	CARBON	10K	5%	1/4W
R631	1-249-410-11	CARBON	270	5%	1/4W F
R632	1-249-411-11	CARBON	330	5%	1/4W
R633	1-249-413-11	CARBON	470	5%	1/4W F
R634	1-249-414-11	CARBON	560	5%	1/4W F
R635	1-249-415-11	CARBON	680	5%	1/4W F
R636	1-249-417-11	CARBON	1K	5%	1/4W F
R637	1-249-418-11	CARBON	1.2K	5%	1/4W F
R638	1-249-420-11	CARBON	1.8K	5%	1/4W F
R639	1-249-422-11	CARBON	2.7K	5%	1/4W F
R640	1-247-843-11	CARBON	3.3K	5%	1/4W
R641	1-249-425-11	CARBON	4.7K	5%	1/4W F
R642	1-249-427-11	CARBON	6.8K	5%	1/4W F
R643	1-249-429-11	CARBON	10K	5%	1/4W
R644	1-249-410-11	CARBON	270	5%	1/4W F
R645	1-249-411-11	CARBON	330	5%	1/4W
R646	1-249-413-11	CARBON	470	5%	1/4W F
R647	1-249-414-11	CARBON	560	5%	1/4W F

Ref. No.	Part No.	Description			Remarks
R648	1-249-415-11	CARBON	680	5%	1/4W F
R649	1-249-417-11	CARBON	1K	5%	1/4W F
R650	1-249-418-11	CARBON	1.2K	5%	1/4W F
R651	1-249-420-11	CARBON	1.8K	5%	1/4W F
R652	1-249-422-11	CARBON	2.7K	5%	1/4W F
R653	1-247-843-11	CARBON	3.3K	5%	1/4W
R654	1-249-425-11	CARBON	4.7K	5%	1/4W F
R655	1-249-427-11	CARBON	6.8K	5%	1/4W F
R656	1-249-429-11	CARBON	10K	5%	1/4W
R657	1-249-431-11	CARBON	15K	5%	1/4W
R658	1-249-410-11	CARBON	270	5%	1/4W F
R659	1-249-411-11	CARBON	330	5%	1/4W
R660	1-249-413-11	CARBON	470	5%	1/4W F
R661	1-249-414-11	CARBON	560	5%	1/4W F
R662	1-249-415-11	CARBON	680	5%	1/4W F
R663	1-249-417-11	CARBON	1K	5%	1/4W F
R666	1-249-407-11	CARBON	150	5%	1/4W F
R667	1-247-807-31	CARBON	100	5%	1/4W
R668	1-249-407-11	CARBON	150	5%	1/4W F
R669	1-249-407-11	CARBON	150	5%	1/4W F
R670	1-249-407-11	CARBON	150	5%	1/4W F
R671	1-247-804-11	CARBON	75	5%	1/4W
R672	1-247-804-11	CARBON	75	5%	1/4W
R673	1-249-407-11	CARBON	150	5%	1/4W F
R674	1-249-407-11	CARBON	150	5%	1/4W F
R675	1-247-804-11	CARBON	75	5%	1/4W
R676	1-247-804-11	CARBON	75	5%	1/4W
R677	1-247-804-11	CARBON	75	5%	1/4W
R678	1-247-804-11	CARBON	75	5%	1/4W
R679	1-247-804-11	CARBON	75	5%	1/4W
R680	1-247-804-11	CARBON	75	5%	1/4W
R681	1-249-407-11	CARBON	150	5%	1/4W F
R682	1-247-807-31	CARBON	100	5%	1/4W
R683	1-249-421-11	CARBON	2.2K	5%	1/4W F
R684	1-249-409-11	CARBON	220	5%	1/4W F
R685	1-249-421-11	CARBON	2.2K	5%	1/4W F
R686	1-249-429-11	CARBON	10K	5%	1/4W
R687	1-249-421-11	CARBON	2.2K	5%	1/4W F
R688	1-249-407-11	CARBON	150	5%	1/4W F
R691	1-249-417-11	CARBON	1K	5%	1/4W F
R692	1-249-417-11	CARBON	1K	5%	1/4W F
R693	1-249-417-11	CARBON	1K	5%	1/4W F
R711	1-249-433-11	CARBON	22K	5%	1/4W
R712	1-249-433-11	CARBON	22K	5%	1/4W
R713	1-249-433-11	CARBON	22K	5%	1/4W
R714	1-249-437-11	CARBON	47K	5%	1/4W
R715	1-249-433-11	CARBON	22K	5%	1/4W
R716	1-249-431-11	CARBON	15K	5%	1/4W
R717	1-249-433-11	CARBON	22K	5%	1/4W
R718	1-249-433-11	CARBON	22K	5%	1/4W
R719	1-247-881-00	CARBON	120K	5%	1/4W
R721	1-249-429-11	CARBON	10K	5%	1/4W
R722	1-249-417-11	CARBON	1K	5%	1/4W F
R723	1-249-441-11	CARBON	100K	5%	1/4W
R724	1-249-421-11	CARBON	2.2K	5%	1/4W F
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-431-11	CARBON	15K	5%	1/4W
R728	1-247-885-00	CARBON	180K	5%	1/4W
R729	1-247-807-31	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remarks
R768	1-249-417-11	CARBON	1K	5%	1/4W F
R769	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV711	1-225-739-11	RES, VAR 50K			
RV712	1-225-739-11	RES, VAR 50K			
		< SWITCH >			
S601	1-473-534-11	ENCODER, ROTARY(JOG DIAL)			
S602	1-473-392-11	ENCODER, ROTARY(VOLUME)			
S631	1-762-196-21	SWITCH, TACT(CD▶▶I)			
S632	1-762-196-21	SWITCH, TACT(TUNER/BAND)			
S633	1-762-196-21	SWITCH, TACT(NON STOP)			
S634	1-762-196-21	SWITCH, TACT(KARAOKE PON/MPX)			
S635	1-762-196-21	SWITCH, TACT(FILE SELECT)			
S636	1-762-196-21	SWITCH, TACT(ENTER/NEXT)			
S637	1-762-196-21	SWITCH, TACT(+▶▶)			
S638	1-762-196-21	SWITCH, TACT(DBFB)			
S639	1-762-196-21	SWITCH, TACT(SURROUND)			
S640	1-762-196-21	SWITCH, TACT(REC PAUSE/START)			
S641	1-762-196-21	SWITCH, TACT(HI-DUB)			
S642	1-762-196-21	SWITCH, TACT(CD SYNC)			
S643	1-762-196-21	SWITCH, TACT(FLASH)			
S644	1-762-196-21	SWITCH, TACT(■)			
S645	1-762-196-21	SWITCH, TACT(TAPE B/►)			
S646	1-762-196-21	SWITCH, TACT(NEXT)			
S647	1-762-196-21	SWITCH, TACT(PREV)			
S648	1-762-196-21	SWITCH, TACT(RETURN)			
S649	1-762-196-21	SWITCH, TACT(SELECT)			
S650	1-762-196-21	SWITCH, TACT(GROOVE)			
S651	1-762-196-21	SWITCH, TACT(◀◀-)			
S652	1-762-196-21	SWITCH, TACT(TIMER SELECT)			
S653	1-762-196-21	SWITCH, TACT(FUNCTION)			
S654	1-762-196-21	SWITCH, TACT(SPECTRUM ANALYZER)			
S655	1-762-196-21	SWITCH, TACT(DISPLAY)			
S656	1-762-196-21	SWITCH, TACT(CLOCK/TIMER SET)			
S657	1-762-196-21	SWITCH, TACT(LOOP)			
S658	1-762-196-21	SWITCH, TACT(TAPE B/◀)			
S659	1-762-196-21	SWITCH, TACT(TAPE A/►)			
S660	1-762-196-21	SWITCH, TACT(TAPE A/◀)			
S661	1-762-196-21	SWITCH, TACT(REPEAT STEREO/MONO)			
S662	1-762-196-21	SWITCH, TACT(PLAY MODE DOLBY NR)			
S663	1-762-196-21	SWITCH, TACT (EDIT DIRECTION TUNER MEMORY)			
		< VIBRATOR >			
X601	1-781-312-11	VIBRATOR, CERAMIC 12.5MHz			
**********					
*	1-658-576-11	SENSOR BOARD **********			
		< CAPACITOR >			
C804	1-162-306-11	CERAMIC	0.01uF	30% 16V	
		< IC >			
IC702	8-749-924-18	PHOTO INTERRUPTER RPI-1391			
IC703	8-749-924-30	PHOTO REFLECTOR GP2S28			

SENSOR ST-BY VIDEO

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R701	1-249-416-11	CARBON	820	5%	1/4W F
R702	1-249-407-11	CARBON	150	5%	1/4W F
**********					
	A-4419-037-A	ST-BY BOARD, COMPLETE (EXCEPT TH)			
		**********			
	A-4419-965-A	ST-BY BOARD, COMPLETE (TH)			
		**********			
	1-533-217-31	HOLDER, FUSE			
		< CONNECTOR >			
CN11	1-564-321-00	PIN, CONNECTOR 2P			
* CN12	1-564-687-11	PIN, CONNECTOR 3P			
		< FUSE >			
⚠F951	1-532-465-31	FUSE 3.15A 250V (EXCEPT TH)			
		< SWITCH >			
⚠VS901	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (EXCEPT TH)			
**********					
	A-4724-727-A	VIDEO BOARD, COMPLETE (EXCEPT TH)			
		**********			
	A-4724-825-A	VIDEO BOARD, COMPLETE (TH)			
		**********			
		< CAPACITOR >			
C101	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C102	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C103	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C104	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C201	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C202	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C203	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C301	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C302	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C303	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C304	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C305	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C306	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C310	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C311	1-216-295-91	SHORT 0			
C313	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C314	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C318	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C319	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C401	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C402	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C403	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C404	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C405	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V
C406	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V
C409	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C410	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C411	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C412	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C413	1-124-778-00	ELECT CHIP	22uF	20%	6.3V

Ref. No.	Part No.	Description			Remarks
C452	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C501	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C502	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C503	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C504	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C505	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C506	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C507	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C509	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C510	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C531	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C532	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C535	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C536	1-126-193-11	ELECT	1uF	20%	50V
C537	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C539	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C540	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C541	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C542	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C543	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C544	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C545	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C546	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C547	1-126-193-11	ELECT	1uF	20%	50V
C548	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C549	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C550	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C551	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C552	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C553	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C555	1-124-779-00	ELECT CHIP	10uF	20%	16V
C556	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C559	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C560	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C561	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C562	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C563	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C564	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C565	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C566	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C568	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C569	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C570	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C571	1-128-065-11	ELECT CHIP	68uF	20%	10V
C573	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C574	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C576	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C577	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CN501	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN503	1-779-416-11	CONNECTOR,FFC(LIF(NON-ZIF))13P			
		< TRIMMER >			
CT503	1-141-539-11	CAP, ADJ 10PF			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
		< DIODE >	
D301	8-719-054-23	DIODE RB706D-40-T146	
D501	8-719-422-12	DIODE UDZ-TE-17-3.9B	
D502	8-719-018-51	DIODE CL-170R-CD-T	
		< IC >	
IC101	8-759-701-39	IC NJM2100M(TE2)	
IC401	8-759-262-00	IC MC14576CFEL	
IC501	8-759-269-92	IC SN74HCU04ANSR	
IC502	8-759-587-67	IC M30620MC-A05FP	
IC504	8-759-269-92	IC SN74HCU04ANSR	
IC505	8-759-535-48	IC CL680T-D1	
IC506	8-759-573-23	IC LC372100PM-J48-TLA	
IC507	8-759-342-01	IC MSM514260C-60JS	
IC509	8-759-535-62	IC PCM1727E-2/T2	
		< JACK >	
J301	1-537-943-11	TERMINAL, S (S VIDEO OUT)	
J302	1-774-227-11	JACK, PIN 1P (VIDEO OUT)	
		< JUMPER RESISTOR >	
JW101	1-216-295-91	SHORT 0	
JW201	1-216-295-91	SHORT 0	
JW401	1-216-295-91	SHORT 0	
JW402	1-216-295-91	SHORT 0	
JW403	1-216-295-91	SHORT 0	
JW404	1-216-295-91	SHORT 0	
JW405	1-216-295-91	SHORT 0	
JW413	1-216-295-91	SHORT 0	
JW421	1-216-295-91	SHORT 0	
JW422	1-216-295-91	SHORT 0	
JW503	1-216-295-91	SHORT 0	
JW504	1-216-295-91	SHORT 0	
JW505	1-216-295-91	SHORT 0	
		< COIL >	
L301	1-410-372-21	INDUCTOR CHIP 1.8uH	
L302	1-410-372-21	INDUCTOR CHIP 1.8uH	
L501	1-216-296-91	SHORT 0	
L502	1-216-296-91	SHORT 0	
L503	1-216-296-91	SHORT 0	
L504	1-410-375-11	INDUCTOR CHIP 3.3uH	
L505	1-216-296-91	SHORT 0	
L506	1-216-296-91	SHORT 0	
L507	1-216-296-91	SHORT 0	
L508	1-216-296-91	SHORT 0	
L509	1-216-296-91	SHORT 0	
L510	1-216-296-91	SHORT 0	
		< TRANSISTOR >	
Q301	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q302	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q303	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q304	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q306	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q307	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q308	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q310	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q453	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q454	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
Q502	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q531	8-729-140-75	TRANSISTOR 2SD999-T1-CLCK	
		< RESISTOR >	
R101	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R102	1-208-441-61	RES,CHIP 1.5K 2% 1/10W	
R103	1-208-441-61	RES,CHIP 1.5K 2% 1/10W	
R105	1-216-295-91	SHORT 0	
R201	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R202	1-208-441-61	RES,CHIP 1.5K 2% 1/10W	
R203	1-208-441-61	RES,CHIP 1.5K 2% 1/10W	
R205	1-216-295-91	SHORT 0	
R301	1-216-624-11	METAL CHIP 75 0.5% 1/10W	
R302	1-216-624-11	METAL CHIP 75 0.5% 1/10W	
R305	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R306	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R307	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R308	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R309	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R312	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R313	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R314	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R315	1-216-047-91	RES,CHIP 820 5% 1/10W	
R316	1-216-657-11	METAL CHIP 1.8K 0.5% 1/10W	
R317	1-216-683-11	METAL CHIP 22K 0.5% 1/10W	
R318	1-216-033-00	METAL CHIP 220 5% 1/10W	
R319	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R320	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R321	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R324	1-216-022-00	METAL CHIP 75 5% 1/10W	
R325	1-216-295-91	SHORT 0	
R327	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R328	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
R329	1-216-649-11	METAL CHIP 820 0.5% 1/10W	
R332	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
R333	1-216-046-00	METAL CHIP 750 5% 1/10W	
R335	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R336	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R340	1-216-022-00	METAL CHIP 75 5% 1/10W	
R341	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R342	1-216-022-00	METAL CHIP 75 5% 1/10W	
R403	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R404	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R405	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R406	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R407	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R408	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R409	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R410	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R411	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R412	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R414	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R415	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R423	1-216-073-00	METAL CHIP 10K 5% 1/10W	

VIDEO

Ref. No.	Part No.	Description			Remarks
R424	1-216-073-00	METAL CHIP	10K	5%	1/10W
R425	1-216-073-00	METAL CHIP	10K	5%	1/10W
R426	1-216-073-00	METAL CHIP	10K	5%	1/10W
R457	1-216-025-91	RES,CHIP	100	5%	1/10W
R458	1-216-025-91	RES,CHIP	100	5%	1/10W
R459	1-216-025-91	RES,CHIP	100	5%	1/10W
R461	1-216-025-91	RES,CHIP	100	5%	1/10W
R462	1-216-025-91	RES,CHIP	100	5%	1/10W
R463	1-216-025-91	RES,CHIP	100	5%	1/10W
R464	1-216-025-91	RES,CHIP	100	5%	1/10W
R501	1-216-025-91	RES,CHIP	100	5%	1/10W
R502	1-216-025-91	RES,CHIP	100	5%	1/10W
R503	1-216-025-91	RES,CHIP	100	5%	1/10W
R504	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-025-91	RES,CHIP	100	5%	1/10W
R506	1-216-025-91	RES,CHIP	100	5%	1/10W
R507	1-216-073-00	METAL CHIP	10K	5%	1/10W
R508	1-216-081-00	METAL CHIP	22K	5%	1/10W
R509	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-081-00	METAL CHIP	22K	5%	1/10W
R511	1-216-081-00	METAL CHIP	22K	5%	1/10W
R512	1-216-081-00	METAL CHIP	22K	5%	1/10W
R513	1-216-081-00	METAL CHIP	22K	5%	1/10W
R514	1-216-081-00	METAL CHIP	22K	5%	1/10W
R516	1-216-073-00	METAL CHIP	10K	5%	1/10W
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-073-00	METAL CHIP	10K	5%	1/10W
R519	1-216-025-91	RES,CHIP	100	5%	1/10W
R520	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R523	1-216-013-00	METAL CHIP	33	5%	1/10W
R530	1-216-081-00	METAL CHIP	22K	5%	1/10W
R531	1-216-025-91	RES,CHIP	100	5%	1/10W
R532	1-216-025-91	RES,CHIP	100	5%	1/10W
R533	1-216-025-91	RES,CHIP	100	5%	1/10W
R534	1-216-073-00	METAL CHIP	10K	5%	1/10W
R535	1-216-073-00	METAL CHIP	10K	5%	1/10W
R536	1-216-033-00	METAL CHIP	220	5%	1/10W
R537	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-073-00	METAL CHIP	10K	5%	1/10W
R542	1-216-049-91	RES,CHIP	1K	5%	1/10W
R543	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R544	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R545	1-216-025-91	RES,CHIP	100	5%	1/10W
R546	1-216-049-91	RES,CHIP	1K	5%	1/10W
R547	1-216-295-91	SHORT 0			
R548	1-216-049-91	RES,CHIP	1K	5%	1/10W
R549	1-216-025-91	RES,CHIP	100	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-121-91	RES,CHIP	1M	5%	1/10W
R556	1-216-025-91	RES,CHIP	100	5%	1/10W
R557	1-216-025-91	RES,CHIP	100	5%	1/10W
R558	1-216-073-00	METAL CHIP	10K	5%	1/10W
R559	1-216-073-00	METAL CHIP	10K	5%	1/10W
R560	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R562	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R564	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R566	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-073-00	METAL CHIP	10K	5%	1/10W
R568	1-216-073-00	METAL CHIP	10K	5%	1/10W
R569	1-216-073-00	METAL CHIP	10K	5%	1/10W
R572	1-216-073-00	METAL CHIP	10K	5%	1/10W
R573	1-216-073-00	METAL CHIP	10K	5%	1/10W
R574	1-216-073-00	METAL CHIP	10K	5%	1/10W
R577	1-216-081-00	METAL CHIP	22K	5%	1/10W
R578	1-216-081-00	METAL CHIP	22K	5%	1/10W
R579	1-216-073-00	METAL CHIP	10K	5%	1/10W
R580	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S501	1-571-395-11	SWITCH, SLIDE (SYSTEM SELECT)			
		< VIBRATOR >			
X501	1-767-510-41	VIBRATOR, CERAMIC 10.0MHz			
X503	1-767-519-11	VIBRATOR, CRYSTAL 27.0MHz			
**********					
		**********			
		MISCELLANEOUS			
		**********			
6	1-773-120-11	WIRE(FLAT TYPE) (19 CORE)			
10	1-773-043-11	WIRE(FLAT TYPE)(17 CORE)			
11	1-773-024-11	WIRE(FLAT TYPE)(15 CORE)			
106	1-775-212-11	WIRE(FLAT TYPE) (23 CORE) (EA,E,JE,MY,SP,TW)			
109	1-233-546-11	TUNER(FM/MW/SW)(EA,E,JE,MY,SP,TW,TH)			
109	1-233-545-14	ENCAPSULATED COMPONENT (TH)			
112	1-690-589-31	WIRE(FLAT TYPE) (13 CORE)			
⚠114	1-575-653-11	CORD, POWER (EXCEPT EA)			
⚠114	1-777-071-21	CORD, POWER (EA)			
⚠115	1-569-007-11	ADAPTOR, CONVERSION 2P (JE/IA)			
⚠115	1-569-008-21	ADAPTOR, CONVERSION 2P (EA)			
257	1-452-925-21	MAGNET ASSY			
* 257	1-452-879-11	MAGNET(EA,E,JE,MY,SP,TW,TH)			
⚠301	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-RP			
302	1-769-069-11	WIRE (FLAT TYPE)(16 CORE)			
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)			
M102	X-4917-504-1	MOTOR ASSY (SLED)			
⚠T11	1-433-902-11	TRANSFORMER, POWER			
S811	1-473-335-11	ENCODER, ROTARY			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remarks
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-872-09	SCREW +BVTT 3X × 8 (S)	
#2	7-685-646-79	SCREW +BVTP 3 × 8 TYPE2 N-S	
#3	7-685-647-79	SCREW +BVTP 3 × 10 TYPE2 N-S	
#4	7-685-103-19	+PTPWH (2 × 5)	
#5	7-685-871-01	SCREW +BVTT 3 × 6 (S)	
#6	7-627-553-17	SCREW,PRECISION +P 2 × 2	
#7	7-685-851-04	SCREW +BVTT 2 × 4 (S)	
#8	7-621-775-10	SCREW +B 2.6 × 4	
#9	7-685-781-09	SCREW +PTT 2 × 4 (S)	
#11	7-628-254-15	SCREW +PS 2.6 × 6	
#12	7-628-254-50	SCREW +PS 2.6 × 16	
#13	7-685-853-04	SCREW +BVTT 2 × 6 (S)	
#14	7-685-861-01	SCREW +BVTT 2.6 × 5 (S)	
#15	7-685-870-09	SCREW +BVTT 3 × 5 (S)	

9-928-941-11

Sony Corporation
Home Audio Company

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